ANALYSIS AND VALUATION OF H-SHARES COMPANIES

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MBA PROJECT REPORT

Presented to

The Graduate School

In Partial Fulfilment

of the Requirements for the Degree of

MASTER OF BUSINESS ADMINISTRATION

THREE-YEAR MBA PROGRAMME

THE CHINESE UNIVERSITY OF HONG KONG

May 1998

<u>APPROVAL</u>

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Degree: Master of Business Administration

Title of Project: Analysis and Valuation of H-Shares Companies

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Date Approved: May 3, 1998

ABSTRACT

This research project attempts to value the equity shares of Maanshan Iron & Steel Company Limited using various popular valuation models. The different valuation arrived at under different models are then compared with the market value of the equity shares.

This study includes a qualitative analysis of the economic environment and the outlook of the industry in which Maanshan Iron & Steel Company Limited operates. Its performance is also compared with similar companies operating in the same economic environment and industry. In addition, quantitative analysis such as ratio and trend analysis was employed to evaluate the financial soundness of Maanshan Iron & Steel Company Limited.

The primary source of information was obtained from published financial statements and publicly available information such as press reports and statistical bulletins.

The study indicates that the values obtained through the various valuation models for Maanshan Iron & Steel Company Limited are close to their market value as quoted on the public stock exchange.

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ACKNOWLEDGEMENTS

I would like to express my special gratitude to the Supervisor of this project, Professor Woody Wu of the School of Accountancy of The Chinese University of Hong Kong. Without his valuable advice and guidance, this project would have gone astray.

Many thanks are also due to my parents for their continuous and unselfish support to me throughout this course, and indeed, throughout my life.

KAN YAT CHO JOE

HONG KONG

May, 1998

CHAPTER 1

INTRODUCTION

The main aim of this project is to arrive at a fair value of a company's shares from the viewpoint of an equity investor. The primary source of information for this study is from the company's financial statements. We would first examine a few aspects of financial statements.

Objective of Financial Statements

The primary objective of preparing financial statements is to reflect the financial effects a company's operating, financial and investment activities on the its financial positions. Any transactions undertaken by a company is ultimately reflected on any one or a combination of the company's cashflow, assets and liabilities, and profit and loss. When the financial effects of all of these transactions are summed and represented in a prescribed format, these are referred to as financial statements.

In effect, a company's financial statements would translate the company's transactions from intangible decisions making into tangible dollars and cents. Users of financial statements would then be able to evaluate the company's actions and decisions making indirectly through the financial statements.

Users of Financial Statements

Since we know that a company's financial statements is of great importance, we then need to know who are the users of these statements so that we can prepare the financial statements in the way that is of maximum value to them. The following briefly describes the major users of financial statements.

Equity Investors

The company's equity investors (owners) are usually different from the company's managers (agents). In most case, the owners are not involved in the day-to-day running of the company and only receive information regarding the company through publicly released information such as financial statements and press release. The shareholder's focus would be primary on the information needed to value the stock. As a result, the most useful information for shareholders would be derived from the financial statements because these would provide the investors with a comprehensive assessment of the company's financial position.

Creditors

Creditors are those who are owed money by the company. These would include banks which provide financing, the company's suppliers which have provided goods or services to the company on credit, etc. The creditors' major concern is whether the company has sufficient funds to repay them. As a result, their major concern would tend to focus on the company's cashflow statements in the short term. However, in the long term, their focus would be on the company's profitability.

Company Management

The company's manager would also be the user of the financial statements. Not only do the statements give them an idea of how well they have been managing the company in the past, they also provide a valuable learning tool so that the managers would learn from their past mistakes or success. In addition, the financial statements are also the basis on which the shareholders judge the performance of the managers. Poorly prepared financial statements may mean loss of jobs for these managers.

Potential Acquirer

The financial statements are the first set of documents that any potential acquirers interested in a takeover of or merger with the target company would look at. The potential acquirer's focus would tend to be on the value of the target company's assets, both tangible and intangible. Indeed, sometimes a company's most valuable asset is its brandname or trademark, rather than its tangible assets such as plant and machinery.

Governmental Departments

Government has great interests in a company's financial statements. This is because the financial statements provide a basis for assessing the various taxes payable by the company. In addition, they also provide a source of information to assess the financial positions of the countries' companies, and therefore gaining an insight into the country's overall economic performance.

CHAPTER 2

METHODOLOGY OF STUDY

This study is a practical analysis and evaluation of a company's financial positions and its equity share value. As a result, this study is not based on any particular theory and is mainly qualitative in nature. The following describes the methodology adopted for this study.

Selection Criteria

The selection of the company is important because being an "outsider", it is often the case that insufficient information is available to perform a detail analysis of a company's financial position. As a result, meaningful analysis based on only publicly available information would only be possible if certain criteria are met. The criteria for selection are discussed as below.

A widely diversified company is hard to analyze in that not enough information is available to breakdown the target company's financial statements into different industry segments. Even though the disclosure requirements in Hong Kong have been steadily improved to provide the public with more information, the amount of information available is still not sufficient for a detail analysis. As a result, the first selection criteria is that at least 80 percent of the target company's turnover and operating profit should be from one industry segment only.

A company which has too many oversea subsidiaries located outside of its main country of operation would be affected by economic and legal factors from different parts of the world. The net effect of these factors on the company's trading results would be hard to determine. As a result, the second selection criteria is that at least 80 percent of the target company's turnover and operating profit, together with its major assets and liabilities, should be derived from or located in one single country.

A company which has undergone serious changes, in respect of its principal business activities or owner/senior management changes within the last three years would be difficult to analyze because of the changes in its operating activities and management styles rendering analysis of past financial data meaningless.

To determine the market value of a company, there is no other place better than the stock market. Even though in a number of cases, companies seemed to be consistently under- or over-valued when compared to the values derived by professional analysts, the stock market is still the only place where the market values of companies are readily available. To facilitate comparison between market value and intrinsic value of a company derived from our analysis, the target company should have been listed on a recognized stock market for the last three years.

Analysis Approach

After selecting a target company, the analysis would be based on a "top-down" approach. First, the economic environment, and then second, the characteristics and outlook of the industry in which the target company operates in, would be analyzed and examined. The company's competitiveness would also be examined through the use of Michael Porter's Five Forces Model. Lastly, various types of risk associated with the company would be reviewed.

In order to obtain an industry norm for benchmarking purposes, the next step would be to select two peer companies that are similar to the target company. The financial aspects of these two peer companies would be used to compare with that of the target company.

At this stage, it is important to note that different companies, even though they operate in the same country and industry, would be subjected to different local economic and legal constraints. This phenomena is especially pronounced in the People's Republic of China ("PRC") where, because of the vast size of the territory and population and its less than ideal governmental controls, many companies engaging in the same line of business are permitted to operate under quite different rules. In addition, companies may adopt different accounting policies and standards. Certain accounting adjustments must then be made to the financial statements of the target company and/or the two peer companies selected in order to perform meaningful comparisons.

Key financial ratios and trend analysis would be performed to evaluate the target company's performances and risk profile when compared with industry norm. The penultimate step would be to calculate the values of the target company using the popular valuation models. Lastly, a comparison of the fair values derived under different valuation methods with the market price would be made and any significant differences would be commented on.

Results of Search for Target Company

Based on the above criteria, it was decided that the target company for this project would be The Maanshan Iron and Steel Company Limited ("Magang"). The reason for choosing this company is that it was the one of the nine companies chosen by the PRC Government to list on The Stock Exchange of Hong Kong Limited ("HKSE"). These nine companies were chosen to "test the waters" in preparation for further listing in Hong Kong by mainland companies. Accordingly, these nine companies should be the model example of the companies that would follow suit.

Indeed, these nine companies were listed on the HKSE over 1993 and 1994 and Magang was successfully listed on 3 November 1993. It has now been four years since Magang was listed and a number of PRC companies have followed suit. As at 28 February 1998, there were forty PRC companies listed on the HKSE. It is now a convenient time to evaluate the performances of these PRC companies and thus hope to determine whether these PRC companies are good investments for investors, and also to gain insight to future listing prospect of the PRC companies. After all, Hong Kong's economic future is and will heavily dependent on its ability to provide financial services and support to the mainland companies.

In addition to Magang, two more PRC companies engaging in the production of steel products were listed on the HKSE. They are the Angang New Steel Company Limited ("Angang") which was listed on 24 July 1997, and Chongqing Iron and Steel Company Limited ("Chonggang") which was listed on the SEHK on 17 October 1997. These two companies are very similar in nature to Magang and therefore were chosen as comparatives in this study.

CHAPTER 3

COMPANY BACKGROUND

Company History

The original Magang is situated in the Nanjing-Wuhu area, one of the seven major iron ore mining districts in the PRC. In 1953, Maanshan Iron Works was established with an iron-smelting capacity of twenty thousand tonnes per annum. In August 1958, the original Magang was formally set up based on the backbone of Maanshan Iron Works.

In 1962, the original Magang established the first train wheel and tyre plant in the PRC. From then onwards to this day, Magang remains the only train wheel and tyre production line in the PRC with an annual production capacity of 170,000 tonnes in 1993. With further capital investments, the original Magang increased its crude steel and steel products production capacity to 675,000 tonnes and 554,000 tonnes respectively by 1978.

In September 1993, the original Magang was split into two separate entities. One entity, which consists of all the production facilities, production-relating support and administration units, became the listed Magang. The other group spinned off consists of the iron-ore and coal mining operations and the other non-production-related units. The iron-ore and coal mining units were responsible for providing all of the iron ore and coal required by

Magang. The other non-production-related units were set up to look after the welfare of all of Magang's workers such as medical, housing, education, sewage treatment, etc. These non-production-related units were excluded from the listed group but will continue to provide such raw materials and services to the listed group in return for a fixed annual fee. The mining and the non-production-related units then became the parent company of Magang.

It is worth noting that many PRC companies adopted a similar spin-off approach to gain listing on the HKSE. The reason behind this approach is two-fold. Firstly, foreign nationals cannot own mining rights under PRC law. As a result, the mining units must be excluded in the listing entity. Secondly, many of the non-production-related units are costs centres. To include them in the listing entity would mean that the trading results of the listed Magang would be adversely affected by the extra overhead costs. Consequently, many PRC companies adopted the same approach to first spin-off the company into two separate entities first before seeking a listing.

In November 1993, Magang applied and successfully obtained a listing on the HKSE by offering 438 million "H" shares to the public in Hong Kong, placement of a further 1,294,930,000 "H" shares to investors worldwide, and offered 687,810,000 "A" shares to the public in the PRC. The "H" shares were issued at HK$2.27 each whilst the issue price for the "A" shares was RMB3.45. A total of RMB6.5 billion was raised as a result.

In 1994, the Group's new twenty-five thousand cubic-metre blast furnace began production. In the year 1996, Magang produced 3.59 million tonnes of pig iron, 2.82 million tonnes of crude steel and 2.19 million tonnes of steel products.

Production Process

Magang is principally engaged in the manufacture and sale of pig iron and steel products. Steel and pig iron are both alloys of iron and carbon. Steel is made by re-smelting iron, has less carbon content than pig iron and is of better malleability and plasticity than iron. Production processes principally comprise of coking, sintering, iron smelting, steel smelting and steel rolling. The production process is briefly described below.

Blending

Raw materials such as coal, iron ore, limestone and dolomite are blended so that the right proportion of each material is correctly mixed together.

Coking

Coal is sorted, powdered and purified using a coke oven to produce coke. Coke is used in the iron smelting process to produce iron.

Sintering

Iron-bearing materials such as iron ore concentrate, fine iron ore, limestone, dolomite and coke are fed into the sintering plant. The coke is ignited by high temperature and the raw materials burns to form sintered ore. After cooling, the sintered ore is broken into uniform sizes ("sinter") ready for iron smelting.

Iron Smelting

Coke, sinter, lump ores and a small amount of limestone and dolomite are fed into the blast furnace and smelted into molten iron ("liquid pig iron").

Steel Smelting

Steel smelting is an oxidation process for reducing impurities in pig iron and scrap steel and for adding ferro-alloys to increase the alloy content of crude steel, in each case to a prescribed level. Impurities are burnt so that crude steel of better purity is produced.

Steel Casting

There are two methods of casting steel: steel ingots casting and continuous casting. In steel ingots casting. Molten steel is poured into moulds to produce steel ingots. In continuous casting, molten steel is continuous fed into a water-cooled crystallizer and when its has hardened, is cut into billets of specified length.

Steel Rolling

Steel ingots and continuously cast billets are hot-rolled into steel products of different sizes and shapes.

Company Structure

The share capital structure of Magang as at 31 December 1996 is shown in Table 1.

TABLE 1

CAPITAL STRUCTURE OF MAGANG AS AT 31 DECEMBER 1996

Types of shares	Percentage of total shares issued
Unlisted Shares:	
State "A" shares	62.5
Legal Persons "A" shares	1.36
Listed Shares:	
Individual "A" shares	9.29
"H" shares	26.85
TOTAL	100.00

State "A" shares were issued to Magang's parent company at spin-off. Legal persons "A" shares can only be owned by PRC companies and enterprises. Both of these types of shares cannot be traded. The individual "A" shares can only be traded by PRC nationals in a PRC stock exchange. The "H" shares can only be traded by non-PRC individual or companies in a non-PRC stock exchange.

Since the State "A" shares cannot be traded, the majority shareholder will always be Magang's parent company. As a result, no account needs to be taken for the premium associated with a majority control (control premium) when the intrinsic values of the shares are calculated.

Operational Structure

Magang consists of 30 units and its operational structure is shown in Table 2.

TABLE 2

MAGANG OPERATING STRUCTURE

Main Function / Department	Constituent Units
Raw materials purchase	Raw Material Supply Company Import And Export Company
Ancillary material production	Refractory Material Plant Ferro-Annoy Plant
Sintering and coking	No.1 Sintering Plant No.2 Sintering Plant Coking Plant
Iron smelting	No.1 Iron Smelting Plant No.2 Iron Smelting Plant No.3 Iron Smelting Plant
Steel smelting	No.1 Steel Smelting Plant No.2 Steel Smelting Plant No.3 Steel Smelting Plant
Steel rolling	Wheel And Tyre Plant Blooming Plant No.2 Steel Rolling Plant No.3 Steel Rolling Plant High Speed Wire Rod Plant Medium Gauge Plate Plant
Production support	Technology Department Safety And Environmental Protection Department Quality Control Department Utilities Supply Plant

Main Function / Department	Constituent Units
	Transport Department Repair And Construction Department Equipment Manufacturing Plant
Sales and marketing	Sales And Marketing Department Import And Export Company
Administration	Secretariat Office Finance And Accounting Department Personnel Department

Out of these 3 units, only the Import and Export Company is a separate company wholly owned by Magang. All the other units are part of Magang.

Principal Products

Magang's steel products can be divided into four principal categories: wire rods, steel sections, steel plates, and train wheels and tyres. Within each principal category, the Group produces a wide range of steel products to different specifications and sizes for different uses. It also manufactures and sells other by-products such as coke, pig iron and coking chemical products. A breakdown of sales of Magang's main products and their major uses is shown in Table 3.

TABLE 3

MAGANG'S MAJOR PRODUCTS AND USAGE FOR THE YEAR 1993

Product type	Product	Major uses	1993 sales by value	1993 sales by volume
Wire Rods	Low carbon wire rods	Steel reinforced cement and concrete piles	28.8%	
	High carbon wire rods	Screws, steel wires and springs	4.2%	
	Others	Nut and bolts	2.3%	

			35.3%	37.3%
Steel sections	L-section	Steel structures, ship-building	14.8%	
	Round rods	Axles, bolts	13.5%	
	Others	Construction, bridges	3.1%	

			31.4%	38.5%
Steel plates	Structural steel plates	Construction, machines	10.0%	
	Steel strips	Construction	3.7%	
	Others	Containers, boilers	3.2%	

			16.9%	13.5%
Wheels and tyres	Wheels	Train wheels	11.7%	
	Rings	Chemical equipment	2.7%	
	Tyres	Train tyres	1.6%	

Product type	Product	Major uses	1993 sales by value	1993 sales by volume
	Others		0.4%	

			16.4%	10.7%
			-------	--------
TOTAL			100%	100%
			=====	=====
Sales by value / volume			RMB2.97 billion	1.5 million tonnes

Market Geography

The majority of Magang's products are sold domestically, Chart 1 illustrates Magang's turnover by geographical area for the year 1996.

CHART 1
MAGANG TURNOVER BY GEOGRAPHICAL AREA
FOR THE YEAR 1996

As can be seen, over 89 percent of Magang's turnover was within the PRC. The contribution to operating profit by geographical area is also consistent with the above analysis. Magang's trading performance is therefore significantly linked to the PRC economy.

CHAPTER 4

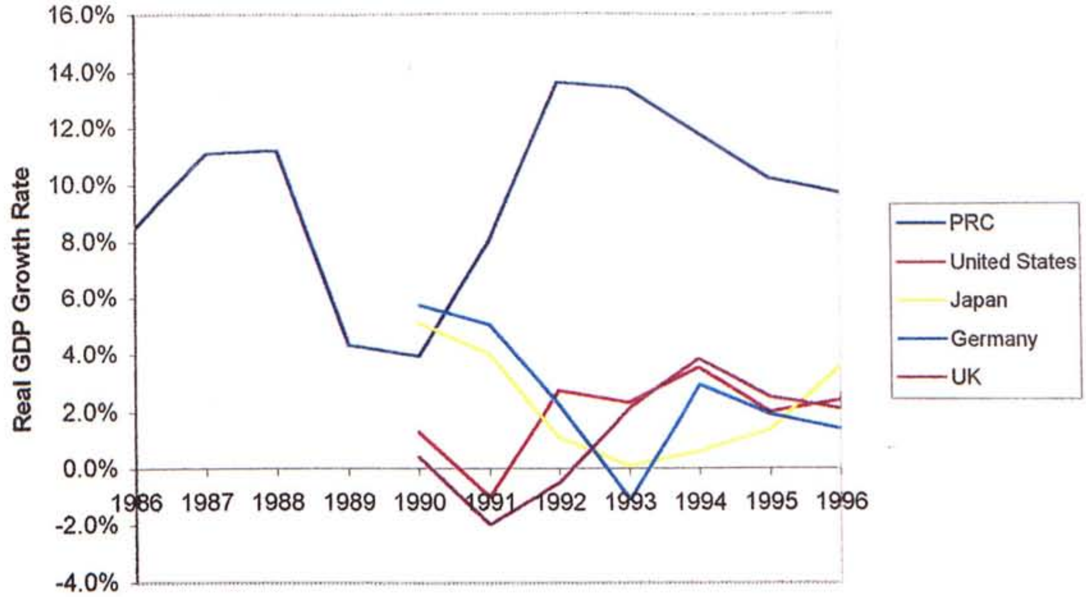
MACRO-ANALYSIS

The PRC Economy

Since approximately 89 percent of Magang's sales are within the PRC, we shall start by performing an analysis of the PRC's economy.

The PRC has been hailed as the next economic super-power. Since it adopted a social market economy, its economic growth has been phenomenal. Its real year-on-year GDP growth rate from 1986 to 1996 is shown in Chart 2.

CHART 2
REAL GDP GROWTH RATE FOR PRC



Source: World Economic Outlook, May 1997 (IMF) and China Statistics Yearbook

The real GDP growth rates for 1989 and 1990 suffered a dramatic drop in the aftermath of the Tianamen Square incident, which severely affected the economy of the PRC. However, even taken into this account, the PRC has managed to achieve an average of 9.56 percent compound annual real GDP growth rate from 1986 to 1996. This is in sharp contrast with the other industrialized countries such as the United States, Japan, Germany and United Kingdom. Such phenomena growth is set to continue. Indeed, the GDP growth rate has been estimated to be 9.8 percent for 1997. With this growth rate, the macro-environment for Magang's business has never looked so good. Especially in an under-developed country such as the PRC, the first phase of growth would tend to concentrate in the infrastructure projects such as transport network, power stations and communication networks. This would mean an increasing demand for building materials such as steel.

In addition, the PRC has also undergone significant economic changes in recent years. The PRC was essentially a planned economy where prices, product mix and production volume were determined by the State. With the continue shift from a planned economy to a socialist economy, state-owned enterprises have been given considerably more freedom in setting their production volume, product mix and selling prices. Companies are therefore able to operate their the most profitably level of output and able to direct their capital investments into profitable production lines.

As a result of such a relaxation of control, steel manufacturers have been able to gear themselves towards market demand and also able to set the prices according to market condition. This is in deep contrast with the planned economy where prices were often set too low to capitalize on the market demand and product mix was incorrectly forecasted resulting in excess inventory for some products but stock-out for the others. As a result of the relaxation in control, steel manufacturers such as Magang was able to enjoy a huge increase in the profit margin.

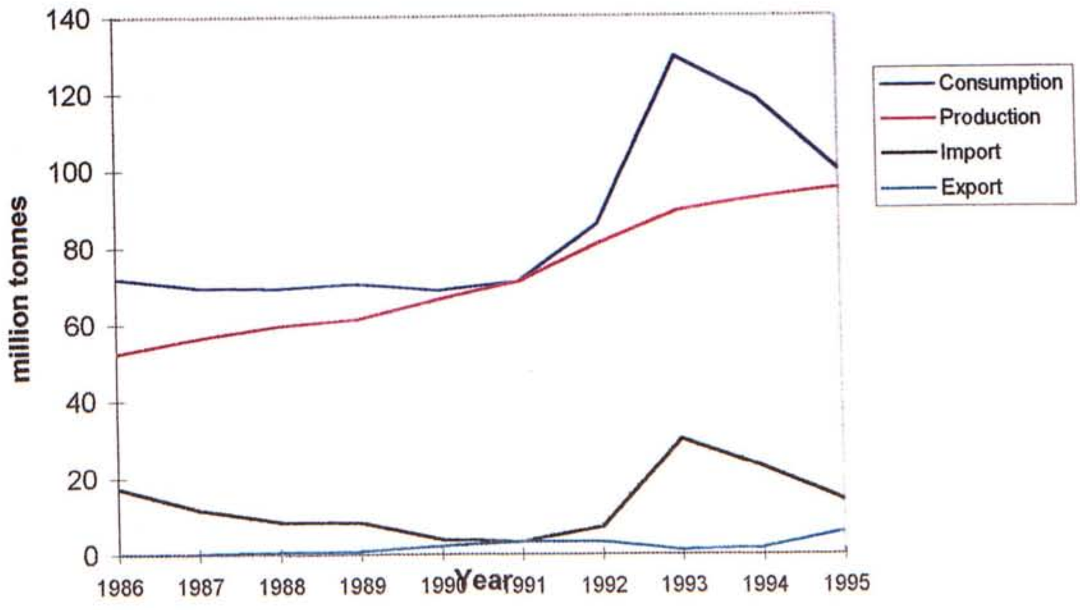
The PRC Government is also currently in negotiation to join the World Trade Organization ("WTO") and it may be only a matter of time before PRC is admitted. This will mean a definite relaxation in the tariff rates currently levied on imports by the PRC Government. This will have a direct adverse effect on the advantage enjoyed by the domestic manufacturers over its oversea competitors. However, at the same time, products made by the PRC would receive similar treatment from other WTO members. Given that the PRC-produced products are so much less expensive than those produced elsewhere, admission into WTO would certainly help PRC to increase its competitive edge.

The Steel Industry

The production, consumption, import and export volume of crude steel for PRC between 1986 and 1995 are shown in Chart 3.

CHART 3

VOLUME OF CONSUMPTION, PRODUCTION, IMPORT AND EXPORT FOR PRC



Source: 1996 Statistical Yearbooks of China published by State Statistical Bureau of PRC

As can be seen, the demand for crude steel has been increasing since 1986. In fact, the compound annual growth rate of crude steel consumption for the PRC is 6.6 percent between 1986 and 1995. This compared favorably with other developed countries such as Japan, United States and Germany whose compound annual growth rate of crude steel consumption are only 0.4 percent, 2.6 percent and 1.4 percent respectively over the same period[1].

As discussed before, the PRC is beginning to undergo major economic changes from a state-planned economy into a socialist economy. The steel industry has seen 100 percent of their product sold at prices fixed by the Government in 1984 to only 7 percent in 1995[1]. Nowadays, only prices for steel products used for military, defense, agriculture, irrigation, and railway purposes are fixed by the State. However, the steel-makers in the PRC are still subject to supervision from the State on a policy level. The Ministry of Metallurgical Industries of the PRC is still responsible for coordination between steel manufacturers themselves and with suppliers, expansion and development of new products, and setting of strategic goals for the steel industry.

Another major change in the PRC's economy is the relaxation of the import and export controls. The PRC steel industry had been protected from oversea competition mainly due to the high import tariffs levied on imports, and also due to the high freight costs of transporting steel over long distances. The tariff rate on steel products are currently ranging between 6 to 23 percent, averaging at 9.15 percent across all of the products[1]. However, if the PRC is admitted into WTO, the tariff rates will certainly be cut. Fortunately, since steel is very expensive to transport, the PRC steel makers will still have a relatively safe margin

[1] Chongqing Iron & Steel Company Limited Placing and New Issue Prospectus 6 October 1998

when they set their prices. On the other hand, oversea competitors may be able to buy into the domestic steel manufacturers and gain entrance to the PRC market. Alternatively, they may set up their own plant in the PRC. With better technology and costs control, these oversea competitors will be able to cut into the market share in the future.

CHAPTER 5

MICHAEL PORTER'S FIVE FORCES

In 1996, there were 24 steel makers in the PRC whose annual production of crude steel exceeded one million tonnes. The aggregate output of these 24 steel manufacturers amounted to 68.5 million tonnes, accounting for 68.2 percent of the total production in PRC in 1996.

In order to analyze Magang's ability to compete in the PRC and its bargaining position with its suppliers and customers, Michael Porter's Five Forces Model is used. The model aims to analyze a company's relative position to the present competition, threat of new entrants, threat from substitute products, bargaining power of suppliers, and the bargaining power of customers.

Present Competition

Magang is considered to be one of the medium-size iron and steel makers in the PRC. The four major iron and steel makers, namely Angang, Shougang Corporation, Baoshan Iron and Steel Company Limited and the Wuhan Iron and Steel Co Ltd ("Wugang"), produced

29.6 million crude steel in 1996, accounting for 29.5 percent of the total PRC production in 1996. Magang's production is relatively small compared to these four major producers. However, its location is very close to Nanjing, which is relatively far away from the major producers. Since steel are bulky and expensive to transport, the location of Magang offers certain protection against competition from other steel manufacturers in the PRC.

In addition, Magang remains the only manufacturer of train wheel and tyre in the PRC. Its unique market position in this respect will provide further buffer against competition.

Threat of New Entrants

The steel industry is a capital-intensive industry which requires blast furnace of considerable sizes to achieve economies of scale. Judging by the balance sheet of Magang, Angang and Chonggang, they have plant and machinery costing RMB 7.9 billion, 2.7 billion and 1.7 billion respectively at their latest balance sheet date. In addition, to produce iron and steel, two essential raw materials are needed, i.e. quality iron ore and coal. If the coal and iron mine are too far away, then the freight costs would be too expensive for the company to be competitive. As a result, the entrance requirement for the steel industry is quite high. Moreover, Government approval probably is needed before one could start a brand new steel plant. It can therefore be concluded that the threat of new entrants is quite low when compared to other industries.

Substitute Products

At the moment, there is no close substitute for steel. It remains one of the most basic construction materials. Again, Magang is relatively safe from the threat of substitute products

Bargaining Power of Suppliers

For the financial year 1996, the five largest suppliers of Magang accounted for 34 percent of the company's total purchases, whilst the largest supplier accounted for 17 percent of total purchase in that year. The largest supplier of Magang most probably was its parent company, which is the sole supplier of iron and coal essential for production of iron and steel. The exact relationship between the two companies is hard to determine, given that they depend on each other to survive. In addition, the parent company, even though its officially holds the majority voting rights of Magang, is really just Magang's sister company and it has no control over the policies of Magang. For the other PRC steel producers listed on HKSE, they face the same situation where their parent companies are always suppliers of the raw materials. In this respect, there is no clear advantage or disadvantage for Magang when compared to its peers. However, for other steel producers which are not listed, they may gain from internal economies of scale and may be able to lower their costs. On the other hand, these companies suffer from a lack access to capital raising channels. Overall, it is hard to say which has the definite advantage over the other.

Bargaining Power of Customers

For the financial year 1996, Magang's five largest customers accounted for less than 30 percent of the company's total sales in that year. Magang is relatively dependent on key customers when compared to Angang. Angang's ten largest customers accounted for 23.4 percent of total sales volume in 1996, none of which accounted for more than 3.8 percent total sales volume. Chonggang's position is similar to Magang. Chonggang's five largest customers accounted for 31.6 percent of its total sales in 1996, of which the largest customer accounted for 7.7 percent. In this respect, Magang's position is similar to the industry average.

CHAPTER 6

RISK FACTORS

The PRC is an under-developed socialist regime and Magang, operating in such a dynamic economic and political environment, would face many challenges and investors must be aware of the potential risks involved in buying an equity share in Magang. In this section, the potential risk factors are discussed in detail.

Risk Associated with the PRC

The PRC has been a planned economy since 1949 where allocation of resources, production level, interest rates, etc. are set by the one-, five- and ten-year State Plan laid down by the PRC Government. Since 1992 when the then premier of the PRC, Mr. Li Peng, re-instated the importance of opening the PRC, it has moved significantly towards a socialist market economy. However, such dramatic changes are experimental and unprecedented. The effect on the PRC economy may not always be positive, as a result, there exist certain risks in investing and trading in the PRC.

The legal system in the PRC is also a concern to many foreign investors. Its legal system is based on written statutes, regulations and directives passed by the PRC

Government. Decided cases (precedents) do not have binding effects on similar cases. In theory, shareholders' rights are protected by the PRC Companies Law, the Listing Rules in Hong Kong and Magang's articles of association. However, as yet, no major cases have been brought by oversea investors so that the interpretation of these law and rules is still subjected to intellectual guesswork. Investors therefore need to keep this in mind when they buy equity shares in PRC companies.

Exchange control in the PRC has also undergone significant changes over the past few years. Before 1994, there were two exchange rates to convert Renminbi ("RMB") to and from other currencies. Foreigners used one rate and PRC nationals and companies used the other. In 1994, the two exchange rates were unified but the RMB remained a currency under strict controls. Foreign investors, who would prefer to receive dividends in foreign currencies, would need to consider the convertibility of dividends denominated in RMB into other currencies.

Risk Factor Associated with the Steel Industry

The PRC is currently negotiating to join the WTO. One of the pre-requisites for doing so would be for the PRC Government to lower its import tariffs on foreign goods. The steel manufacturers in the PRC were protected from foreign competition partly because of the high tariffs faced by importers. With the import tariffs lowered, the PRC steel manufacturers may face severe competition in the future as foreign steel producers are able to provide steel products with better quality and lower prices due to the more advances technology available.

The steel industry is also heavily dependent on the PRC's economic climate. Demand for steel is high only when the heavy investment plans have been made. In addition, the Government still has significant influence over the economy. As experienced in 1993 and 1994 when the inflation rate in the PRC reached over 15 percent, the PRC Government introduced the austerity measure to curb increasing demand and inflation. This resulted in a sudden drop in PRC's economic activities and subsequently, demand for steel had been greatly affected.

Risks Associated with Magang

Magang, similar to Angang and Chonggang, is heavily dependent on the supply of iron ore and other raw materials from its parent company. Its parent company is also responsible for providing the necessary raw materials and welfare support to Magang's workers. Without its support, Magang would not be able to operate at a competitive level as iron ore and other raw materials such as coal are bulky and expensive to transport from other areas. On the other hand, there is no logical reason for Magang's parent company not to carry on with the existing relationship; otherwise, it would have to find outside third party customers for its iron ore and raw materials. The relationship will probably continue in the future, but one area of concern is that the prices paid by Magang for the raw materials and other services rendered may not be the best prices available to Magang. To look after the original Magang's employees and other facilities, Magang may be forced to carry on buying over-priced products and services from its parent company.

Environmental protection is a new concept in the PRC but it has already been monitored closely. In fact, the State Environmental Protection Bureau has, in 1993, announced a list of three thousand harmful pollutants requiring treatment before discharging. Magang produces various wastes during its production cycle and six of its unwanted wastes were included in the three thousand pollutants to be treated before discharge. Charges amounted to RMB17.2 million were paid to the Maanshan Municipal Government in 1993 to treat such wastes[2] and the charges may increase significantly in the future as Magang continued to expand its production capacity.

Magang's ability to raise capital for capital expenditure was also in some way hampered by the increasing number of PRC steel manufacturers seeking listing on the HKSE. As at 31 December 1997, there were three companies listed on the HKSE engaging in the iron and steel industry from the PRC. Another PRC steel company, Wugang, is set to become listed in 1998. This would certainly affect Magang's ability to raise additional capital through the HKSE as investors have more choices to invest in the PRC steel producers.

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[2] Maanshan Iron & Steel Company Limited New Issue and Placing Prospectus 20 October 1993

CHAPTER 7

FINANCIAL ANALYSIS

Evaluation Of Accounting Policies

The PRC Government, in anticipation of increasing foreign investments, has gradually introduced changes to the mandatory accounting policies previously adopted by the PRC state-owned enterprises. The reform is in the same direction as the international accounting standards that foreign investors are more familiar with. Magang's accounting policies had been revised since its listing on the HKSE and they are in conformity with the international accounting standards.

There is no right or wrong in respect of the accounting policies adopted by a company. The reasonableness and appropriateness of a company's accounting policies can only be determined when compared with the industry norm. A comparison of the policies adopted by Magang, Angang and Chonggang was performed and no major differences were noted except for the treatment of fixed assets.

Magang did not revalue their fixed assets as part of its listing exercise but both Angang and Chonggang have done so. As a result of the revaluation, both Angang and Chonggang's net assets value and annual depreciation charge have increased as a result.

In addition, the three companies adopted different depreciation rates for their fixed assets. The depreciation rates are shown in Table 4.

TABLE 4

DEPRECIATION RATES ADOPTED BY MAGANG, ANGANG AND CHONGGANG

Asset type	Magang	Angang	Chonggang
Land use rights	50 years	N/A[1]	50 years
Buildings	16-50 years	40-45 years	13-50 years
Plant, machinery and equipments	7-20 years	15-22 years	6-23 years
Transport and other equipments	7-11 years	12 years	4-16 years

1: not applicable

The difference in depreciation rates is not very significant given that they overlap with each other. As a result, it can be concluded that, with the exception of the fixed assets revaluation, the accounting policies of Magang falls within the industry norm and no major accounting adjustments are needed.

Adjustments to Financial Statements

Magang has been listed on the HKSE since November 1993, and Angang and Chonggang were listed on the HKSE in the second half of 1997. Magang has essentially adopted accounting policies and accounting standards that is in conformity with international accounting standards since its listing. However, for Angang and Chonggang, both of these companies were formerly state-owned enterprises and adopted significantly different accounting policies prior to their listing. To prepare for listing, both Angang and Chonggang were to adopt accounting policies similar to international accounting standards after their listing. In the listing prospectus, various accounting adjustments were made so that the trading records for the three latest years for Angang and Chonggang would reflect the trading results as if the revised accounting policies were adopted throughout the period under review. Such adjustments were made so that investors would be able to evaluate the financial position of Angang and Chonggang under the more familiar accounting conventions.

Even though adjustments were made within the listing prospectus, there are still differences between the financial statements of Magang, Angang and Chonggang regarding the treatment of certain accounting issues. As a result, there are still adjustments that need to be made to ensure that the financial statements for Magang, Angang and Chonggang were prepared under similar accounting policies. The adjustments to be made are discussed as follows.

Fixed Assets Valuation and Depreciation Charge

Since both Angang and Chonggang revalued their fixed assets before its listing on the HKSE. As a result, Angang's assets value and the corresponding annual depreciation charge would increase by RMB133 million and RMB31 million respectively[3]. Chonggang has undergone a similar exercise and its fixed assets has been revalued, resulting in a revaluation reserve of RMB436 million and an increment of depreciation charge of RMB28 million per annum[1].

[3] Angang New Steel Company Limited New Issue and Placing 15 July 1997

On the hand, no revaluation was done for Magang and all fixed assets were stated at costs. To ensure uniformity, the fixed assets value of both Angang and Chonggang would be adjusted back to its value at costs. Since the additional depreciation arising from revaluation would not have any impact on Angang's results until 1997, no adjustment to depreciation is required.

The effect of adopted different depreciation rates for their fixed assets is almost impossible to determine without a detail breakdown of the assets involved, as a result, no adjustments would be made.

Bad And Doubtful Debt Provision

Magang has made provisions for the bad and doubtful debts arising from their trading operations throughout the trading period under review. However, Angang sold its products to its parent company first, which would onsold them to the end customers. No bad debt provision was ever made in Angang's books prior to its listing. After listing, Angang would sell to its customers directly and would assume the credit risk involved. To ensure uniformity, the trading results of Angang need to be adjusted for the bad and doubtful debt provisions that would need to be made if Angang had been selling to its customers direct.

Chonggang operated in a similar fashion to Magang in that Chonggang sold its products directly to its customers. However, Chonggang, as part of the listing exercise, did not assume the ownership of several outstanding debts at spin-off. These debts have been assumed by Chonggang's parent company. To reflect Chonggang management's ability to assess and manage credit risk, the bad and doubtful debt relating to these unassumed debts should be included in the trading results of Chonggang.

Taxation

During recent years, the PRC enterprises have undergone a series of changes on the taxation system. On 1 January 1994.The PRC Government has introduced the Value-Added-Tax ("VAT") as a way to curb rising inflation and a more effective way to collect taxes. All goods sold within the PRC are subjected to a VAT of 17 percent. Buyers of the goods are liable to pay this tax ("output VAT") over to the seller who would collect the taxes on behalf of the tax authority. The output VAT would then be paid over to the tax authority on a periodic basis. However, the sellers can offset the output VAT collected against the VAT arising from their purchase of other goods ("input VAT"). The net VAT payable by the seller would then be the difference between its input and output VAT. Magang, Angang and Chonggang were affected to different extent by the introduction of the VAT. The financial impact on these three companies must therefore be standardized to facilitate comparison.

In addition, state enterprises such as Magang, Angang and Chonggang were liable to pay levies and fees similar in nature as profit tax to the central and local provincial Government prior to their listing. These levies and fees were determined by negotiation and the three companies under review were subjected to different levies resulting in different effective profit tax rates. To ensure uniformity, adjustments would need to be made. The financial effects of these two taxes were discussed below.

VAT

Magang were liable to VAT from the date of its implementation on 1 January 1994. Angang, before its listing in 1997, was not subjected to such taxes and was therefore able to achieve a higher gross margin when compared to Magang.

On the other hand, effective from 1 January 1997, Angang was subjected to a sales surtax of 10 percent calculated based on the net VAT liability. Such surtax was levied by the Provincial Government to assist in the "Educational and City Construction and Maintenance". Had Angang been subjected to such taxes throughout 1996, its profit would certainly be reduced. To ensure uniformity, the surtax must also be included in Angang's trading results.

Chonggang has been subjected to the 17 percent VAT since its introduction from 1 January 1994 and therefore no adjustment is required in this respect.

Profit tax

Magang has been subjected to a profit tax rate of 15 percent since it was listed on the HKSE in 1993. This is contrary to the regulation laid down by the central government which stated that all joint-stock company such as Magang, Angang and Chonggang must pay profit tax at 33 percent. Such concession has been agreed between Magang and the Anhui tax authority.

One interesting point to note regarding Magang's profit tax position is that its profit tax is calculated on the accounting profit for each financial year with almost no adjustment for depreciation and other non-tax-deductible items. This is because Magang must adopt the depreciation rates provided by the government and certain expenditure such as entertainment must not be over a certain pre-determined amount. As a result, accounting profit can be used to calculate the profit tax liability without any significant adjustments.

Angang was formerly a state-owned enterprise and was subjected to an annual levy agreed with the local tax authority. Effective from its listing, Angang must pay profit tax at 33 percent of its accounting profit annually. A question then arise as to whether Angang's results should be adjusted by a 33 percent profit tax charge or a 15 percent charge consistent with that charged to Magang.

The PRC Government has recently indicated that the it intends to ensure that all PRC companies must pay profit tax at 33 percent, rather than allowing the local tax bureau to negotiate with the PRC companies for tax cuts[4]. However, as the PRC economic and legal environment is still at a relatively primitive stage, many issues are still resolved by way of negotiation, rather than following the written rules. As a result, it would be quite hard to change things from their *status quo*. It is envisaged that Magang and Angang would still be subject to the 15 percent and 33 percent profit tax charge in the near future respectively. As a result, it was decided that the results of Angang should be adjusted for a profit tax charge calculated at 33 percent on its accounting profit.

[4] Apple Daily 13 March 1998

Similarly for Chonggang, no profit tax had been charged prior to its listing. Effective from 1 January 1997, Chonggang would be subjected to profit tax at 33 percent. However, agreement has been reached with the Chongqing Municipal Government ("CMG") to the effect that CMG would refund the excess profit tax payable by Chonggang over the amount of tax calculated at 15 percent on Chonggang's accounting profit. In effect, Chonggang would be liable to profit tax at 15 percent only. The 15 percent profit tax rate would be used to adjust Chonggang's results for comparison purposes.

Another accounting treatment that needs to be considered is deferred tax. If profit tax adjustment was to be made, then the corresponding deferred tax adjustment should also be made on the timing differences between accounting profit and profit adjusted for taxation purposes. As discussed before, timing differences should be small for Magang, and indeed, there was no "significant timing differences" to calculate deferred tax. However, deferred tax had been levied by both Angang and Chonggang's reporting accountant in the listing prospectus. This may be due to the different interpretation of the tax rules by the local tax authority, resulting in provisions made by companies that were not tax-deductible until actual payments has been made. In this case, deferred tax charge would be put through to Angang and Chonggang's trading results to reflect the full charge of timing differences.

Land Use Rights

Land in the PRC is never sold outright to PRC nationals or foreigners. They can only be leased in return for a lump sum payment or annual rentals. If a lump sum payment is paid in return for the right to use the land for a period of time, then this is referred to as Land Use Rights and the lump sum is amortized over the period in which the land use right is effective. For both Magang and Angang, land use rights of 50 years has been granted as part of the listing exercise. The relevant costs have also been written off over the relevant land use right period. For Chonggang, no land use rights had been granted and Chonggang has opted for the payment of annual rental payment of RMB11.9 million per annum from 1997 to 1999. Thereafter, the rent would be negotiated between Chonggang and its parent company and increment is limited to once every three years and each increment cannot be more than 10 percent of the latest rental. Such an adjustment should then be included in the past trading results of Chonggang to ensure uniformity.

Statutory Surplus Reserve and Statutory Public Welfare Fund

According to the PRC Companies Law and the Magang's article of association, Magang is required to allocate 10 percent of its profit after taxation to the Statutory Surplus Reserve ("SSR") until such reserve reaches 50 percent of the Magang's registered capital. Part of the reserve may be capitalized as the Company's share capital, provided the remaining balance of the reserve after capitalization is not less than 25 percent of the registered share capital of the Company. As at 31 December 1996, Magang's SSR stood at RMB165 million whereas the balance of the share capital stood at RMB6.45 billion. This means that a further RMB3.06 billion would need to be transferred to the SSR in accordance with Companies Law. Since this reserve has no specified purpose and was set up for the sole purpose of protecting the Company's capital, the transfer is effectively a reserve movement aimed to restrict the company's ability to pay dividends. As a result, no adjustments need to be made.

Similarly, in accordance with the PRC Companies Law, Magang is required to transfer between 5 to 10 percent of its profit after tax to a Statutory Public Welfare Fund ("SPWF"). The SPWF is a non-distributable reserve other than in the liquidation of the company. The SPWF must be used for capital expenditure on staff welfare facilities and these facilities remain the properties of Magang. Magang has made contribution to the SPWF amounting to 10 percent of its profit after tax annually since its listing in 1993. Payment has already been made out of this reserve to build staff quarters for Magang's staff and it is expected that the quarters, when completed, would be sold to the staff at cost or at discount.

Since this reserve is to be used on staff welfare, the transfer to this reserve therefore represents an after-tax expense to Magang and as such, needs to be treated as an expense to show the true profit attributable to shareholders.

Neither Angang nor Chonggang mentioned the after-listing treatment of these two reserves, as laid down by the PRC Companies Law. However, it is envisaged that both of these companies would need to make similar transfer to the SSR and SPWF. The amount to be transferred to the SSR is fixed at 10 percent of the profit after tax amount, but the amount to be transferred to the SPWF is stated to be between 5 to 10 percent of the profit after tax figure. Since the capital expenditure on staff welfare mainly represents houses to be built using funds out this reserve and sold at costs or even substantial discount to the staff, such expenditure is estimated to be a substantial expenditure. As a result, a transfer of 10 percent of their after-tax profit is assumed. Such transfer is therefore expected to be made in Angang and Chonggang's trading results.

Financial Ratio Analysis

Financial ratio analysis can be roughly classified into seven major categories; they are profitability and growth trend, cash, liquidity, working capital/cashflow, turnover, financial leverage and debt service coverage. Each of these categories is used to analysis Magang's financial ratios.

Profitability and Growth Trend

A summary of the Group trading record for the three years ended 31 December 1996 is shown in Table 5.

TABLE 5

MAGANG'S TRADING RESULTS FOR THE PAST THREE YEARS

ENDED 31 DECEMBER 1996

	1996 RMB'000	Y-O-Y *change*	1995 RMB'000	Y-O-Y *change*	1994 RMB'000
Turnover	6,780,405	*9.1%*	6,216,213	*2%*	6,076,488
Profit before tax	87,167	*91.4%*	45,530	*-94%*	806,713
Taxation	(14,118)	*112.3%*	(6,649)	*-95%*	(132,248)
Profit tax	73,049	*87.9%*	38,881	*-94%*	674,465
Earning per share	1.13 cents	*88.1%*	0.60 cents	*-94%*	10.45 cents

Profit before tax has been adjusted for transfer to SPWF

Even though the Group's turnover has increased slightly from 1994 to 1996, its operating profit has decreased significantly over the same period. Management has contributed this drop to the austerity measure introduced by the PRC Government since 1994 to curb the rising inflation. Credit was being "squeezed", resulting in a drop in demand for infrastructure, thus adversely affecting the demand for steel. The only way to keep the sales volume level was to reduce prices, resulting in much lower margin.

The key ratios for Magang's profitability analysis are shown in Table 6.

TABLE 6

MAGANG'S PROFITABLILITY RATIO

	1994	1995	1996	1997*
EBIT to turnover	15.6%	6.2%	6.1%	0.8%
Net Profit Margin	11.1%	0.6%	1.1%	0.4%
Earnings Per Share (cents)	10.45	0.60	1.13	0.23
Return on Equity (ROE)	6.3%	0.3%	0.6%	0.2%
Return on Total Assets (ROA)	5.1%	0.3%	0.5%	0.1%

*:unaudited results for first half of 1997, ratios were annualised where appropriate

Magang's results, when compared to Angang and Chonggang, certainly do not appeal to investors. Table 7 shows a comparison of their key profitability ratio.

TABLE 7

COMPARISON OF MAGANG'S PROFITABIILITY WITH

ANGANG AND CHONGGANG

	Magang 1996	Magang 1997*	Angang 1996	Angang 1997*	Chonggang 1996
EBIT to turnover	6.1%	0.8%	10.2%	n/a	10.4%
Net Profit Margin	1.1%	0.4%	5.6%	7.3%	5.7%
Earnings Per Share (cents)	1.13	0.23	n/a	0.18	n/a
Return on Equity (ROE)	0.6%	0.2%	21.6%	22.9%	39.6%
Return on Total Assets (ROA)	0.5%	0.1%	13.5%	14.9%	10.2%

*: *Unaudited results for first half of 1997 for Magang and Angang, ratios annualized where appropriate*

The profit margin analysis has shown that Magang has been performing quite badly when compared to similar companies within the industry. Table 8 is a comparison of the key profit indicators for Magang, Angang and Chonggang. The results of the three companies have not been adjusted to re-align the accounting policies, but to illustrate the growth trend of each company over the same period.

TABLE 8

PROFIT TREND FOR MAGANG, ANGANG AND CHONGGANG

		Turnover RMB'000	Profit before tax RMB'000	Net profit RMB'000
Magang	1994	6,076,488	881,653	749,405
	1995	6,216,213	49,850	43,201
	1996	6,780,405	95,283	81,165
Chonggang	1994	3,013,281	158,987	67,860
	1995	3,075,373	180,788	110,513
	1996	3,031,891	270,165	169,339
Angang	1994	4,104,000	585,000	392,000
	1995	2,787,000	286,000	192,000
	1996	4,975,000	608,000	407,000

Magang seemed to have suffered the most during the austerity exercise in 1995 and 1996, whereas for Angang, even though the sales turnover remained static, the net profit has increased. For Chonggang, it suffered the fate as Magang but to a much lesser extent, and the fall in profit had not been as severe as Magang. It is hard to guess at why Magang should suffer more than its peers. One possible reason is that Angang is more diversified in that its products include steel plates for making home appliances and office furnitures. This diversification strategy meant that Angang was less dependent on any single market. On the other hand, Chonggang has diversified overseas (its export to oversea countries accounted for more than 20 percent of its total sales revenue in 1995) and had therefore gained shelter from the fall in demand of steel products in the PRC. In addition, its unique position in the South-Eastern part of the PRC meant that it has almost monopoly control over the steel products market in that part of the PRC. In contrast, the other steel producers such as Magang are located near the coastal area to facilitate transport of raw materials and finished products, but this also meant that they are subjected to more severe competition from each other. They are also more dependent on demand from the infrastructure and shipping industry. Table 9 is a comparison with other steel producers.

TABLE 9

COMPARISON OF PROFITABILITY WITH OTHER STEEL PRODUCER

Company name	Country of operation	Year end	Turnover US$'m	Equity US$'m	ROE %	ROA %	Net profit margin (%)
Magang	PRC	31/12/96	820	1,426	0.6%	0.5%	1.1%
Nippon Steel Co	Japan	31/3/97	3,061,128	950,060	0.4%	0.2%	0.1%
Pohang Iron & Steel Co	Korea	31/12/96	18,532	7,704	1.0%	3.8%	6.1%
Kawasaki Steel Co	Japan	31/3/97	74,551	40,640	2.0%	0.6%	1.1%
Weirton Steel Co Inc	USA	31/12/95	1,352	214	22.5%	3.7%	3.6%

Even though the above may be somewhat misleading because some companies such as Nippon Steel Co are engaged in other metallurgical businesses in addition to steel, this gives a rough indication of the performance of Magang when compared to other steel producers. As can be seen, Magang performed consistently lower than the other steel producers, with the exception of Nippon Steel Co, in all of the ratios calculated above. This may indicate less than sufficient use of capital and resources. In fact, with the devaluation of the Korean won in recent months, many steel producers would find it hard to compete with Korean producers for the export market.

Cash Ratio

Cash is very important to any businesses. The business may still survive in the short to medium term if it has sufficient cash to meet its liabilities even though it is making a loss. However, if a business does not have the necessary cash to meet its obligations, its does not matter how profitable the business is, it cannot survive. It is therefore paramount to examine the cash position of Magang. Table 10 shows the key ratios for measuring Magang's cash position.

TABLE 10

CASH RATIO FOR MAGANG, ANGANG AND CHONGGANG

	Magang 1994	Magang 1995	Magang 1996	Angang 1996	Chonggang 1997*
Cash to current assets	48.1%	44.7%	37.2%	1.0%	2.4%
Cash to current liabilities	87.6%	72.1%	55.7%	0.8%	2.3%
Cash to sales	68.6%	56.1%	37.4%	0.1%	0.8%
Cash to total assets	31.4%	26.9%	18.9%	0.1%	1.5%

**: Based on balance sheet as at 31 March 1997*

Magang has a much superior cash position than Angang and Chonggang, and over many other listed companies in Hong Kong. However, it might be worth to note that Magang only spent half of the proceeds from the initial public offering ("IPO") in 1993. The proceeds were used almost exclusively on capital expenditure in accordance with the listing prospectus. This may be against Magang's wishes but market rumor has it that all of the "H" share companies are under strict rules as to how they are to spend their proceeds from the IPO. In many cases, approval from the Government is required in order to use the proceeds. As a result, Magang still has a relative large amount of cash compared to the other two companies.

On the hand, it can be seen that over the years from 1994 to 1996, there has been a steady decline in the liquidity ratios. Part of the reason is the continued expansion of Magang's production facilities, thereby drawing down on Magang's cash balance. The definite downward trend is expected to continue in the future.

One point that may be noted is that holding a large amount of cash for a long period is not necessary an advantageous strategy for shareholders. Shareholders invest in the company to earn returns, to hold such investment in cash would mean that the cash has not been utilized to make returns for shareholders.

Liquidity

Working capital management is very important to a business, especially in times of slowing economic activities. This is because in such hard times working capital management policy would mean that there would be adequate cash to meet payments. Table 11 is an analysis of the key working capital ratios for Magang, Angang and Chonggang.

TABLE 11

WORKING CAPITAL RATIO ANALYSIS

	Magang 1994	Magang 1995	Magang 1996	Angang 1996	Chonggang 1997*
Current ratio	1.82	1.61	1.50	0.82	0.95
Quick ratio	1.38	1.15	1.01	0.03	0.39

Note: all figures are based on 31st December except for Chonggang which is based on 31 March

Based on the above, observers might deduce that Magang has a much better working capital management mechanism than both Angang and Chonggang. However, this is again due to the large amount of cash that Magang held. Overall, Magang's liquidity position is still considered to be slightly below the safety net because a current and quick ratio of at least two is considered to be on the safe side.

Angang seemed to have the worst position. In fact, a quick ratio of 0.03 is very dangerous and the floatation exercise would certainly be most welcomed by Angang.

Working Capital/Cashflow

The key ratios for analyzing Magang's cashflow position is shown in Table 12.

TABLE 12

CASHFLOW POSITION FOR MAGANG

	Magang 1994	Magang 1995	Magang 1996
Cash flow from operations to sales	15.1%	16.1%	6.7%
Cash flow from operations to total assets	6.9%	7.7%	0.4%

No comparison was made with Angang or Chonggang because their financial statements have not yet been published, as a result, no cashflow statements are available for examination. However, based on the trend over the years, Magang seemed to have suffered the most in 1996 where cash flow from operations declined significantly. This is in line with the fall in profitability, resulting in less cash inflow from operations.

Turnover

One way to examine this issue further would be examine the various turnover ratios of Magang's current assets and liabilities. Table 13 shows various assets turnover for Magang, Angang and Chonggang.

TABLE 13

ASSETS TURNOVER FOR MAGANG, ANGANG AND CHONGGANG

	Magang 1994	Magang 1995	Magang 1996	Angang 1996	Chonggang 1997*
Sales to total assets	0.46	0.48	0.51	2.36	1.78
Sales to working capital	1.55	2.09	3.01	72.29	51.88
Account receivable turnover	3.30	4.76	4.70	n/a	8.76
Accounts payable turnover	1.76	1.62	2.13	64.80	3.58
Inventory turnover	2.46	2.23	2.47	13.49	4.08
Account receivable days	111	77	78	n/a	42
Accounts payable days	207	226	171	6	102
Inventory turnover days	148	164	148	27	90

*: *based on unaudited results up to 31 March 1997 annualized to 12 months*

Account receivable turnover for Angang was not applicable because Angang's parent company took over all account receivable balance prior to listing

Magang's sales turnover ratio seemed to be the worst when compared to Angang and Chonggang. The "Sales to working capital" ratio may be distorted for Angang and Chonggang because they both have relatively small amount of capital tied up as net current assets/liabilities. However, Magang's accounts receivable, accounts payable and inventory turnover ratios were all worst than its peers. This may indicate certain "dead" assets, liabilities and inventory in Magang's books, or less efficient use of its assets.

A more detail examination of the inventory turnover may be obtained by examining the relative proportion of the various components of inventory. Table 14 shows such comparison.

TABLE 14

COMPARISON OF INVENTORY CONSTITUENTS

	Magang 1994 % of total	Magang 1995 % of total	Magang 1996 % of total	Angang 1996 % of total	Chonggang 1997* % of total
Raw materials	36%	33%	39%	14%	57%
Work in progress	24%	23%	24%	22%	16%
Finished goods	13%	13%	4%	8%	13%
Spare parts	28%	30%	32%	56%	14%
	100%	100%	100%	100%	100%
Total value of inventory (RMB'000)	1,997,145	2,260,296	2,220,475	373,279	602,282

In general, a company which is performing well should have a majority of its inventory held as raw materials, a lesser proportion as work in progress and the least proportion should be finished goods. From the above, it can be seen that Magang's ratio improved in 1996, with its smallest proportion of inventory held as finished goods (4 percent). This compares favorably with 1994 and 1995 and also with Angang and Chonggang. As a result, Magang's inventory turnover may not be a problem after all.

Financial leverage

As point out by the Miller and Modigliani model, a company that pays profit taxes and has debt has a higher market value than the one that does not. The tax shield on the debt will mean a higher return for the equity holders. However, debt also increases the default risk of a company, thus increasing the discount rate required by the equity investors. Table 15 shows the financial leverage for Magang, Angang and Chonggang.

TABLE 15

FINANCIAL LEVERAGE FOR MAGANG, ANGANG AND CHONGGANG

	Magang 1994	Magang 1995	Magang 1996	Angang 1996	Chonggang 1997*
Long term debt to equity	0.11	0.09	0.12	0.60	2.89
Long term debt to total assets	0.10	0.08	0.11	0.37	0.73
Total liabilities to total assets	0.47	0.46	0.46	0.56	0.75

**: based on balance sheet as at 31 March 1997*

Judging from the above, Magang's key balance sheet ratio have not changed significantly over the three years period ended 31 December 1996. As at 31 December 1996, Magang's financial leverage is better when compared to Chonggang and Angang. Part of the reason why Magang's financial leverage is so low is because of the RMB 6.5 billion share proceeds that Magang raised in 1993. This enabled Magang to finance its capital expenditure through internal resources, rather than external financing from banks.

Debt service coverage

The following table, Table 16, illustrates Magang, Angang and Chonggang's ability to service their debt and dividends.

TABLE 16

DEBT SERVICE RATIO

	Magang 1994	Magang 1995	Magang 1996	Angang 1996	Chonggang 1996
Interest coverage (based on EBIT)	4.39	1.14	1.18	7.59	3.64
Interest coverage (based on cashflow)	4.25	2.93	1.30	n/a	n/a
Dividend coverage	2.95	3.88	7.03	n/a	n/a

One striking point to note is that the interest coverage ratio for Magang has been in the decline over the three years period under review. Even though the interest expense for Magang has been quite steady in the three years period, its earnings has declined significantly over the same period. This has posed a serious question mark over Magang's ability to repay interest when they are due. An interest coverage ratio of less than two is certainly a serious concern for the investors.

Five or ten years earlier, the PRC Government would have done everything possible to rescue state-owned enterprises that are in financial difficulties. Companies such as Magang would be rescued by the State if they were in serious difficulties. Such a low interest coverage ratio would then pose any concerns to investors because they know that the State would always act as "lender of the last resort". Nowadays, the PRC Government has gradually changed its stand on the loss-making state enterprises and even indicated that these enterprises would be allowed to go under as part of the major economic revolution. As a result, Magang's trading record up to 1996 is certainly not encouraging for investors and they would demand a higher than average return for the increased default risk.

CHAPTER 8

VALUATION

There are a number of methods which have been developed to calculate the intrinsic value of a company. In general, the valuation of a company's equity can be categorized into four basic approaches. They are earnings based, cashflow based, dividend based, and assets and liabilities based. In practice, the four approaches translate into the four valuation models that are familiar to the investing public, i.e. price-earning multiple, discounted cashflow model, dividend growth model, and assets and liabilities based model.

In order to use the dividend discount model and the discounted cashflow model, the discount rate applicable to Magang must first be determined. The valuation model thus begins with the estimation of the discount rate for Magang (the discount rate is also sometimes referred to as the costs of capital or the required rate of return).

Calculation of Discount Rate

In order to arrive at the discount rate for Magang, the Capital Asset Pricing Model ("CAPM") gives the discount rate as follows:

$R_i = R_f + \beta * (R_m - R_f)$

Where R_i = discount rate applicable to company *i*
R_f = return rate for risk free investments
R_m = return rate for the market
β = Beta for company *i*

A company's Beta is calculated by the following formula:

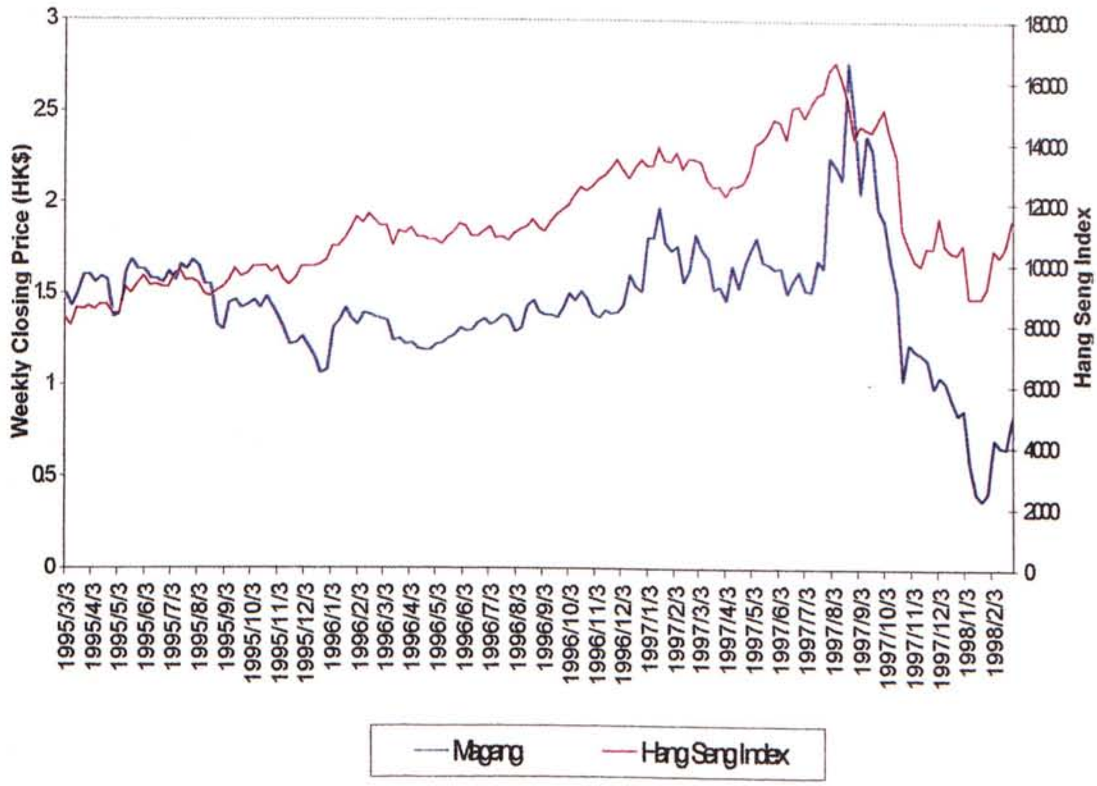
$\beta = \text{Covariance } (r_i - r_m)/\sigma_m^2$

where R_i = return rate for company i
r_m = return rate for the market
σ_m^2 = variance of market return rate

The Beta for Magang was calculated using the weekly closing price of Magang from 3 March 1995 to 27 February 1998, the weekly closing Hang Seng Index for the same period (see Appendix 1 for data used). Chart 4 gives a graphical comparison of the weekly closing price of Magang and the Hang Seng Index for this period.

CHART 4

WEEKLY CLOSING PRICE OF MAGANG AND HANG SENG INDEX



Source: Reuters database

As can be seen from the chart above, Magang's share price movement closely followed that of the Hang Seng Index, but the variance is greater. As a result, it may be suspected that the Beta for Magang would be greater than one. In fact, our calculation of Beta for Magang was 1.49.

The return rate for risk free investment was taken as the weekly closing of the Hong Kong Inter Bank Offer Rate ("HIBOR") for the period from 3 March 1995 to 27 February 1998. The average values for the one-month, two-month and three-month HIBOR over this period were 6.31 percent, 6.46 percent and 6.59 percent respectively. The average of these three rates, which was 6.45 percent, was used as the risk free investment return rate.

Lastly, the market return rate was taken as the annual compound return rate of the Hang Seng Index over the same period as for the calculation of the risk free return rate and Beta. This was found to be 11.94 percent.

The required return rate for Magang, i.e. the discount rate used to discount Magang's future dividend and cashflow, is therefore:

$R_i = 6.45\% + 1.49 * (11.94\%-6.45\%) = 14.63\%$

Asset and Liability Based Value

Under this scenario, it is assumed that the company is disposed of as a going concern. A company's assets and liabilities are valued individually to arrive at a fair value for the company as a whole. Monetary assets such as debtor and cash would most probably be realized at book value. However, assets such as plant and machinery would be worth much less than their book value under liquidation.

Lonergan[5] suggested some guidelines to estimate the realizable value of various types of assets under this scenario, they are shown in Table 17.

TABLE 17

PERCENTAGE OF BOOK VALUE OF ASSETS REALIZED AT SALE OFF

Type of asset	Realization at sale off
Fixed Assets	60-80%
Debtors	80-95%
Stock	50-70%
Work-in-progress and Raw Materials	10-40%
Deferred costs/assets	0%
Trade Creditors	100%
Borrowing	100%

Based on the above percentages and Magang's balance sheet as at 31 December 1996, the valuation of Magang's assets and liabilities as a going concern can be obtained. Table 18 shows the detail calculation.

[5] W Lonergan, "The Valuation of Business, Shares and Other Equity", Longman Professional, 1992

TABLE 18

REALIZED VALUE OF MAGANG'S ASSETS AT SALE OFF

	Book Value RMB'000	Realisation	Realisable value RMB'000
Fixed Assets	7,917,049	60%	4,750,229
Construction in Progress	2,903,889	60%	1,742,333
Other Long Term Assets	328,739	50%	164,370
Current Assets			
Cash and Bank Balance	2,536,225	100%	2,536,225
Deferred VAT recoverable	51,770	100%	51,770
Debtors	1,443,986	80%	1,155,189
Stock	2,220,475	50%	1,110,238
Prepayments	552,471	50%	276,236
Income Tax Prepaid	4,109	100%	4,109
Current Liabilities			
Bank Loans	1,909,369	100%	1,909,369
Creditors and accruals	2,579,238	100%	2,579,238
Proposed Final Dividend	64,553	100%	64,553
Long Term Liabilities	1,450,413	100%	1,450,413
Net Assets	11,955,140		5,787,126

With 6.4 billion shares in issued, this model values Magang at RMB0.89 per share. This is incidentally quite close to the trading price as at 28 February 1998, but is nevertheless only a coincident as no investors would believe that Magang was to be disposed of.

Price Earning Multiple

The price earning multiple ("P/E ratio") for Magang was estimated using the average P/E ratio for the industry (calculated using the average P/E ratio for Magang, Angang and Chonggang) and adjusted for the extra risk for Magang. The adjusted P/E ratio was then multiplied by the estimated future recurring earning for Magang.

The P/E ratio for Magang as at 28 February 1998 was 70.9. No P/E ratios were available for Angang and Chonggang because they were listed in 1997 and no P/E ratio is available until they released their trading results for 1997. However, based on the forecasted earning as shown in their respective listing prospectus and the share price quoted on 28 February 1998, the P/E ratio for Angang and Chonggang were calculated to be 4.7 and 4.3 respectively. The large differences between the P/E ratios for Magang and the other two companies may be because of the fact that the price of Magang has declined by such a large margin (Magang shares' highest trading price from 1 March 1997 to 28 February 1998 was HK$3.70, comparing to its price of HK$0.83 on 28 February 1998), that investors may decide to hold onto the shares rather than disposing them and realizing the loss. As a result, Magang's shares may reach a "floor" value and unless there is a dramatically decline in Magang's results, the shares would be traded at an abnormally high price, resulting in an above industry-average P/E ratio.

Since Magang's P/E ratio is far too large to be realistic, the industry average was obtained using Angang and Chonggang's P/RE ratio at listing. The weighted average P/E ratio for Angang and Chonggang was calculated to be 4.5. By applying this ratio to the expected earning of Magang, the price of Magang can be obtained. In theory, the earnings used in such an exercise should be the future earnings of Magang, taken into account of earnings growth. However, for practical purposes, the earnings for Magang for the next five years would be calculated and an average annual earning figure would be derived therefrom.

To estimate the expected earnings for Magang for the next five years, it was assumed that the earnings growth for Magang is directly related to the growth rate of the PRC steel industry. From the analysis of the PRC steel industry, the industry managed to achieve an annualized compound growth rate of 6.6 percent over the past ten years. By applying this growth rate to the earnings for 1993, the expected future earnings for Magang for the 1997 to 2001 would be adjusted to achieve an earning growth of 6.6 percent over the period from 1993 to 2001. Table 19 shows the estimated earning per share up to 2001.

TABEL 19

ESTIMATED EARNING PER SHARE FOR MAGANG

	EPS (RMB CENTS)
1993	16.99
1994	11.61
1995	0.67
1996	1.26
1997	2.34
1998	4.34
1999	8.11
2000	15.08
2001	28.33

It is assumes that after 2001, the earning of Magang would be maintained at RMB28.33 cents, after adjustment for inflation. Using the average P/E ratio of Angang and Chonggang, which was calculated to be 4.5, the price for Magang's shares should be traded at RMB1.27.

Dividend Growth Model

The dividend growth model indicates that a company's value would be calculated based on its dividend payout as follows:

Value = Dividend for next year / (discount rate applicable – dividend growth rate)

Dividend amounting to RMB 1 cents was paid for the financial year 1996. The past dividend payout for Magang is shown in Table 20.

TABLE 20

PAST DIVIDEND PAYOUT FOR MAGANG

	Dividend (RMB cents)	Dividend payout ratio
1993	9.3	57.1%
1994	7.0	60.3%
1995	1.0	149.3%
1996	1.0	79.4%

The dividend payout ratio for Magang ranged from 57.1 percent to 149.3 percent of the reported EPS figure. Obviously, Magang was paying the minimum dividend in 1995 and 1996 of RMB 1 cents per share. As a result, the payout ratio for these two years is discarded. The average payout ratio for 1993 and 1994 amounted to 58.7 percent.

Since both Angang and Chonggang were listed in 1997, no dividends had been paid. Even though both of these companies paid out a large proportion of their profits to their then parent company, these payout could not be used as guideline for future reference because both Angang and Chonggang would have to set out a dividend policy similar to other listed companies. As a result, the payout ratio of 58.1 percent would be assumed for the next five years.

Based on a discount rate of 14.63 percent obtained previously, and assuming that Magang would keep a constant payout ratio in the future, and the dividend growth is kept at 6.6 percent constant in the future, the net present value of Magang's dividend is shown in Table 21.

TABLE 21

NPV OF ESTIMATED FUTURE DIVIDEND FOR MAGANG

Year	Expected EPS	Payout ratio	Dividend	NPV of dividend
1997	2.34	0.581	1.36	1.36
1998	4.34	0.581	2.52	2.19
1999	8.11	0.581	4.71	3.58
2000	15.08	0.581	8.76	5.82
2001	28.33	0.581	16.46	9.53
2002 onwards	30.20	0.581	17.55	110.43

Year	Expected EPS	Payout ratio	Dividend	NPV of dividend
			TOTAL	132.91

Our calculation therefore indicated that Magang's share price should be RMB1.33 per share.

Discount Cashflow Model

A practical approach to estimate a company's value by way of a discounted cashflow model ("DCM") is to estimate the cashflow during the exceptional growth/decline period up to the "terminal year". Thereafter, a constant growth is assumed for the company.

For Magang, the terminal year is taken to be 2001. During this phase, the turnover is estimated to grow by 6.6 percent per annum, which is the annualized compound growth rate of the consumption of steel in the PRC. Thereafter, the turnover is estimated to grow by 5 percent, which is the assumed inflation rate from 2001 onwards. It is assumed that Magang would be able to "peg" its profit against inflation, not no more after 2001.

The detail cashflow is shown in Appendix 2. The net present value of the future cashflow was calculated to be RMB4.19 billion. The value of Magang should be RMB 0.64.

Summary of Findings

The fair value of Magang's shares under different models is summarized in Table 22.

TABLE 22

SUMMARY OF VALUES OBTAINED UNDER DIFFERENT MODELS

Model	Fair Value (RMB)
Price-earning multiple	1.27
Discounted cashflow	0.64
Dividend growth	1.33
Assets and liabilities based	0.89
Market value as at 28/2/98	**0.88**

As seen from the above, different models give a different value for Magang's shares. It is hard to say which model gives the most accurate results, but the market price of RMB0.88 was only higher than one of the four values calculated in the above. It can therefore be reasonably assumed that Magang was under-valued then. This was partly because of the adverse market condition in Asia at the moment. Many investors were over-reacting to the turmoil, thus forcing many stocks to be under-valued. According to our study, Magang is under-valued at RMB0.88 and should be purchased as a result.

CHAPTER 9

LIMITATION TO STUDY

It has now been five years since the first batch of "H" shares companies were listed on the HKSE. There have been various articles, seminars and publications released on the accounting, operational and managerial policies and approaches of these PRC companies. With the opening up of the PRC economies, more statistical data have been made available to the investing public so that more understanding have been gained of the PRC economy. In this study, a detail analysis of the external and internal factors affecting the trading results of Magang has been examined. However, there are certain areas that this analysis could not address and these areas are discussed below.

Lack of Comprehensive and Accurate Data

Even though more data have been made available to the public by the PRC Government, there has been doubt as to their accuracy. In addition, the PRC, being an under-developed country, still lacks behind the developed countries in the comprehensiveness of the data available. As a result, there are analysis which could not be performed due to the lack of data.

Lack of Peers Data

Even though two peer companies have been listed on the HKSE, thus providing valuable data to compare Magang's results against, there is still a lack of data from other steel makers in the PRC. This is in sharp contrast with other countries such as the States or Japan where many companies within the same industry are listed in the local stock exchange, many of their financial data are available publicly for analysts to use as comparison. In the PRC, there are many iron and steel manufacturers but the financial data for most for these companies are not available publicly. As a result, the analysis is limited to using three companies, including the target company, to compute the industry average.

Limited Listing Period

Since Magang was only listed on the HKSE for a little more than 5 years, its correlation with the market return Beta, which is an essential factor used to calculate Magang's costs of capital, is thus limited to a five-year period. This, coupled with the recent Asian financial turmoil which caused abnormal stock market movements, may result in an inaccurate estimate of the Beta. The valuation obtained through the use of financial models dependent on the accuracy of Beta, i.e. the dividend discount model and DCM, may therefore be distorted.

Weekly Closing for Magang, Hang Seng Index, 1-month, 2-month and 3-month HIBOR

APPENDIX 1

Maanshan : 323			Hang Seng Index			1 MONTH HIBOR		2 MONTH HIBOR		3 MONTH HIBOR	
Date	Magang	Weekly return	Date	Hang Seng I	Weekly return	Date	Close	Date	Close	Date	Close
03/03/95	1.5		03/03/95	8,185.15		03/03/95	6.03125	03/03/95	6.32813	03/03/95	6.53125
03/10/95	1.43	-4.7%	03/10/95	7,949.39	-2.9%	03/10/95	5.88281	03/10/95	6.25	03/10/95	6.44531
03/17/95	1.5	4.9%	03/17/95	8,534.71	7.4%	03/17/95	5.76563	03/17/95	6.0625	03/17/95	6.30469
03/24/95	1.6	6.7%	03/24/95	8,484.66	-0.6%	03/24/95	5.64063	03/24/95	5.9375	03/24/95	6.14844
03/31/95	1.6	0.0%	03/31/95	8,587.72	1.2%	03/31/95	5.875	03/31/95	6.03125	03/31/95	6.28125
04/07/95	1.56	-2.5%	04/07/95	8,470.28	-1.4%	04/07/95	5.86719	04/07/95	6.00781	04/07/95	6.21094
04/14/95	1.59	1.9%	04/14/95	8,661.99	2.3%	04/14/95	5.67969	04/14/95	5.92188	04/14/95	6.08594
04/21/95	1.57	-1.3%	04/21/95	8,645.39	-0.2%	04/21/95	5.74219	04/21/95	5.91466	04/21/95	6.05469
04/28/95	1.37	-12.7%	04/28/95	8,361.03	-3.3%	04/28/95	6.48438	04/28/95	6.5	04/28/95	6.5625
05/05/95	1.39	1.5%	05/05/95	8,332.17	-0.3%	05/05/95	6.17188	05/05/95	6.25	05/05/95	6.32813
05/12/95	1.62	16.5%	05/12/95	9,217.83	10.6%	05/12/95	6.17969	05/12/95	6.20313	05/12/95	6.26563
05/19/95	1.68	3.7%	05/19/95	9,013.32	-2.2%	05/19/95	6.20313	05/19/95	6.25	05/19/95	6.3125
05/26/95	1.63	-3.0%	05/26/95	9,329.18	3.5%	05/26/95	6.07813	05/26/95	6.11719	05/26/95	6.17969
06/02/95	1.63	0.0%	06/02/95	9,559.74	2.5%	06/02/95	6.03906	06/02/95	6.09375	06/02/95	6.13281
06/09/95	1.58	-3.1%	06/09/95	9,267.62	-3.1%	06/09/95	5.85938	06/09/95	5.875	06/09/95	5.9375
06/16/95	1.58	0.0%	06/16/95	9,313.95	0.5%	06/16/95	5.76563	06/16/95	5.82813	06/16/95	5.90625
06/23/95	1.56	-1.3%	06/23/95	9,224.36	-1.0%	06/23/95	5.60156	06/23/95	5.6875	06/23/95	5.76563
06/30/95	1.62	3.8%	06/30/95	9,206.54	-0.2%	06/30/95	5.82031	06/30/95	5.875	06/30/95	5.9375
07/07/95	1.57	-3.1%	07/07/95	9,632.25	4.6%	07/07/95	5.52344	07/07/95	5.60156	07/07/95	5.65625
07/14/95	1.66	5.7%	07/14/95	9,727.96	1.0%	07/14/95	5.60938	07/14/95	5.70313	07/14/95	5.76563
07/21/95	1.63	-1.8%	07/21/95	9,410.23	-3.3%	07/21/95	5.60156	07/21/95	5.67188	07/21/95	5.8125
07/28/95	1.68	3.1%	07/28/95	9,451.69	0.4%	07/28/95	5.625	07/28/95	5.67969	07/28/95	5.77344
08/04/95	1.65	-1.8%	08/04/95	9,362.83	-0.9%	08/04/95	5.5625	08/04/95	5.625	08/04/95	5.75
08/11/95	1.55	-6.1%	08/11/95	9,006.93	-3.8%	08/11/95	6.19531	08/11/95	6.20313	08/11/95	6.22656
08/18/95	1.55	0.0%	08/18/95	8,895.82	-1.2%	08/18/95	6.09375	08/18/95	6.125	08/18/95	6.15625
08/25/95	1.33	-14.2%	08/25/95	9,080.39	2.1%	08/25/95	6.17188	08/25/95	6.1875	08/25/95	6.25
09/01/95	1.3	-2.3%	09/01/95	9,196.47	1.3%	09/01/95	6.16406	09/01/95	6.19531	09/01/95	6.25
09/08/95	1.45	11.5%	09/08/95	9,393.21	2.1%	09/08/95	6.17969	09/08/95	6.20313	09/08/95	6.25
09/15/95	1.46	0.7%	09/15/95	9,797.40	4.3%	09/15/95	6.0625	09/15/95	6.125	09/15/95	6.1875
09/22/95	1.42	-2.7%	09/22/95	9,541.87	-2.6%	09/22/95	6.24219	09/22/95	6.24219	09/22/95	6.25781
09/29/95	1.44	1.4%	09/29/95	9,646.34	1.1%	09/29/95	6.14063	09/29/95	6.16406	09/29/95	6.21904
10/06/95	1.46	1.4%	10/06/95	9,873.90	2.4%	10/06/95	5.86719	10/06/95	5.92969	10/06/95	6.01563
10/13/95	1.42	-2.7%	10/13/95	9,883.78	0.1%	10/13/95	5.88281	10/13/95	5.9375	10/13/95	5.99219
10/20/95	1.48	4.2%	10/20/95	9,895.24	0.1%	10/20/95	5.875	10/20/95	5.9375	10/20/95	6.00781
10/27/95	1.43	-3.4%	10/27/95	9,680.75	-2.2%	10/27/95	5.8125	10/27/95	5.875	10/27/95	5.96875
11/03/95	1.37	-4.2%	11/03/95	9,855.80	1.8%	11/03/95	5.78906	11/03/95	5.88281	11/03/95	5.9375
11/10/95	1.3	-5.1%	11/10/95	9,411.85	-4.5%	11/10/95	5.64844	11/10/95	5.80469	11/10/95	5.875
11/17/95	1.22	-6.2%	11/17/95	9,287.90	-1.3%	11/17/95	5.83594	11/17/95	5.89063	11/17/95	5.95313
11/24/95	1.23	0.8%	11/24/95	9,488.75	2.2%	11/24/95	5.75781	11/24/95	5.875	11/24/95	5.92969
12/01/95	1.26	2.4%	12/01/95	9,862.55	3.9%	12/01/95	6.03906	12/01/95	6.03906	12/01/95	6.05469
12/08/95	1.21	-4.0%	12/08/95	9,863.61	0.0%	12/08/95	6	12/08/95	5.99219	12/08/95	5.99219
12/15/95	1.15	-5.0%	12/15/95	9,858.65	-0.1%	12/15/95	6	12/15/95	6	12/15/95	6.02344
12/22/95	1.06	-7.8%	12/22/95	9,932.20	0.7%	12/22/95	5.96094	12/22/95	5.96094	12/22/95	5.96094
12/29/95	1.08	1.9%	12/29/95	10,073.39	1.4%	12/29/95	5.96094	12/29/95	5.9375	12/29/95	5.9375
01/05/96	1.31	21.3%	01/05/96	10,529.90	4.5%	01/05/96	5.64844	01/05/96	5.6875	01/05/96	5.70313

APPENDIX 1

Weekly Closing for Magang, Hang Seng Index, 1-month, 2-month and 3-month HIBOR

Maanshan : 323			Hang Seng Index			1 MONTH HIBOR		2 MONTH HIBOR		3 MONTH HIBOR	
Date	Magang	Weekly return	Date	Hang Seng I	Weekly return	Date	Close	Date	Close	Date	Close
01/12/96	1.35	3.1%	01/12/96	10,540.01	0.1%	01/12/96	5.73438	01/12/96	5.75	01/12/96	5.75
01/19/96	1.42	5.2%	01/19/96	10,764.09	2.1%	01/19/96	5.625	01/19/96	5.625	01/19/96	5.6875
01/26/96	1.36	-4.2%	01/26/96	11,111.87	3.2%	01/26/96	5.69531	01/26/96	5.6875	01/26/96	5.6875
02/02/96	1.33	-2.2%	02/02/96	11,469.40	3.2%	02/02/96	5.40625	02/02/96	5.4375	02/02/96	5.4375
02/09/96	1.39	4.5%	02/09/96	11,310.28	-1.4%	02/09/96	5.22656	02/09/96	5.28125	02/09/96	5.30469
02/16/96	1.38	-0.7%	02/16/96	11,594.99	2.5%	02/16/96	5.03906	02/16/96	5.15625	02/16/96	5.20313
02/23/96	1.37	-0.7%	02/23/96	11,390.41	-1.8%	02/23/96	5.0625	02/23/96	5.125	02/23/96	5.1875
03/01/96	1.36	-0.7%	03/01/96	11,194.94	-1.7%	03/01/96	5.0854	03/01/96	5.15625	03/01/96	5.21875
03/08/96	1.35	-0.7%	03/08/96	11,217.79	0.2%	03/08/96	5.17188	03/08/96	5.21875	03/08/96	5.25781
03/15/96	1.24	-8.1%	03/15/96	10,557.58	-5.9%	03/15/96	5.25	03/15/96	5.375	03/15/96	5.4375
03/22/96	1.25	0.8%	03/22/96	11,026.73	4.4%	03/22/96	5.17969	03/22/96	5.29688	03/22/96	5.42188
03/29/96	1.22	-2.4%	03/29/96	10,957.20	-0.6%	03/29/96	5.375	03/29/96	5.375	03/29/96	5.42969
04/05/96	1.23	0.8%	04/05/96	11,139.88	1.7%	04/05/96	5.25	04/05/96	5.3125	04/05/96	5.375
04/12/96	1.2	-2.4%	04/12/96	10,849.80	-2.6%	04/12/96	5.25781	04/12/96	5.32031	04/12/96	5.41406
04/19/96	1.19	-0.8%	04/19/96	10,818.49	-0.3%	04/19/96	5.14063	04/19/96	5.22656	04/19/96	5.3125
04/26/96	1.19	0.0%	04/26/96	10,732.79	-0.8%	04/26/96	5.14844	04/26/96	5.25	04/26/96	5.3125
05/03/96	1.22	2.5%	05/03/96	10,734.24	0.0%	05/03/96	5.16406	05/03/96	5.25	05/03/96	5.375
05/10/96	1.23	0.8%	05/10/96	10,597.73	-1.3%	05/10/96	5.11719	05/10/96	5.25	05/10/96	5.375
05/17/96	1.25	1.6%	05/17/96	10,816.85	2.1%	05/17/96	5.30469	05/17/96	5.312	05/17/96	5.40625
05/24/96	1.27	1.6%	05/24/96	11,019.16	1.9%	05/24/96	5.32031	05/24/96	5.32031	05/24/96	5.375
05/31/96	1.31	3.1%	05/31/96	11,264.73	2.2%	05/31/96	5.32813	05/31/96	5.33594	05/31/96	5.38281
06/07/96	1.29	-1.5%	06/07/96	11,196.55	-0.6%	06/07/96	5.31818	06/07/96	5.375	06/07/96	5.4233
06/14/96	1.3	0.8%	06/14/96	10,864.99	-3.0%	06/14/96	5.5625	06/14/96	5.59659	06/14/96	5.64773
06/21/96	1.34	3.1%	06/21/96	10,855.29	-0.1%	06/21/96	5.42708	06/21/96	5.52604	06/21/96	5.58854
06/28/96	1.36	1.5%	06/28/96	11,020.90	1.5%	06/28/96	5.55769	06/28/96	5.60096	06/28/96	5.66346
07/05/96	1.33	-2.2%	07/05/96	11,177.13	1.4%	07/05/96	5.56731	07/05/96	5.61058	07/05/96	5.67788
07/12/96	1.35	1.5%	07/12/96	10,802.68	-3.4%	07/12/96	5.51042	07/12/96	5.66146	07/12/96	5.75
07/19/96	1.38	2.2%	07/19/96	10,845.30	0.4%	07/19/96	5.425	07/19/96	5.60625	07/19/96	5.69375
07/26/96	1.37	-0.7%	07/26/96	10,705.57	-1.3%	07/26/96	5.43269	07/26/96	5.58173	07/26/96	5.65865
08/02/96	1.29	-5.8%	08/02/96	10,961.97	2.4%	08/02/96	5.39423	08/02/96	5.5625	08/02/96	5.64423
08/09/96	1.31	1.6%	08/09/96	11,104.03	1.3%	08/09/96	5.375	08/09/96	5.5	08/09/96	5.59028
08/16/96	1.43	9.2%	08/16/96	11,175.98	0.6%	08/16/96	5.3125	08/16/96	5.45192	08/16/96	5.56731
08/23/96	1.46	2.1%	08/23/96	11,424.64	2.2%	08/23/96	5.33173	08/23/96	5.44712	08/23/96	5.5625
08/30/96	1.4	-4.1%	08/30/96	11,159.02	-2.3%	08/30/96	5.43269	08/30/96	5.50962	08/30/96	5.61058
09/06/96	1.38	-1.4%	09/06/96	11,025.59	-1.2%	09/06/96	5.47917	09/06/96	5.60417	09/06/96	5.71875
09/13/96	1.38	0.0%	09/13/96	11,369.04	3.1%	09/13/96	5.36538	09/13/96	5.52404	09/13/96	5.66346
09/20/96	1.37	-0.7%	09/20/96	11,592.36	2.0%	09/20/96	5.4375	09/20/96	5.55729	09/20/96	5.66667
09/27/96	1.42	3.6%	09/27/96	11,759.39	1.4%	09/27/96	5.41667	09/27/96	5.50521	09/27/96	5.61979
10/04/96	1.5	5.6%	10/04/96	11,905.51	1.2%	10/04/96	5.37981	10/04/96	5.50962	10/04/96	5.63462
10/11/96	1.46	-2.7%	10/11/96	12,218.40	2.6%	10/11/96	5.3125	10/11/96	5.41346	10/11/96	5.54327
10/18/96	1.51	3.4%	10/18/96	12,510.05	2.4%	10/18/96	5.3125	10/18/96	5.40104	10/18/96	5.54167
10/25/96	1.47	-2.6%	10/25/96	12,388.38	-1.0%	10/25/96	5.36875	10/25/96	5.44375	10/25/96	5.56875
11/01/96	1.39	-5.4%	11/01/96	12,529.27	1.1%	11/01/96	5.43125	11/01/96	5.5	11/01/96	5.56875
11/08/96	1.37	-1.4%	11/08/96	12,751.16	1.8%	11/08/96	5.32955	11/08/96	5.44318	11/08/96	5.51705
11/15/96	1.41	2.9%	11/15/96	12,889.37	1.1%	11/15/96	5.36932	11/15/96	5.46591	11/15/96	5.53977

APPENDIX 1

Weekly Closing for Magang, Hang Seng Index, 1-month, 2-month and 3-month HIBOR

Maanshan : 323			Hang Seng Index			1 MONTH HIBOR		2 MONTH HIBOR		3 MONTH HIBOR	
Date	Magang	Weekly return	Date	Hang Seng I	Weekly return	Date	Close	Date	Close	Date	Close
11/22/96	1.39	-1.4%	11/22/96	13,116.79	1.8%	11/22/96	5.44792	11/22/96	5.55208	11/22/96	5.625
11/29/96	1.4	0.7%	11/29/96	13,393.93	2.1%	11/29/96	5.625	11/29/96	5.64063	11/29/96	5.69792
12/06/96	1.44	2.9%	12/06/96	13,102.73	-2.2%	12/06/96	5.69712	12/06/96	5.70673	12/06/96	5.71635
12/13/96	1.6	11.1%	12/13/96	12,784.07	-2.4%	12/13/96	5.59896	12/13/96	5.63021	12/13/96	5.63542
12/20/96	1.54	-3.8%	12/20/96	13,131.41	2.7%	12/20/96	5.53846	12/20/96	5.59135	12/20/96	5.63942
12/27/96	1.51	-1.9%	12/27/96	13,404.14	2.1%	12/27/96	5.50694	12/27/96	5.54167	12/27/96	5.58333
01/03/97	1.8	19.2%	01/03/97	13,222.79	-1.4%	01/03/97	5.35938	01/03/97	5.41667	01/03/97	5.48958
01/10/97	1.8	0.0%	01/10/97	13,191.50	-0.2%	01/10/97	5.25	01/10/97	5.35	01/10/97	5.48125
01/17/97	1.97	9.4%	01/17/97	13,856.40	5.0%	01/17/97	5.08854	01/17/97	5.25	01/17/97	5.41146
01/24/97	1.78	-9.6%	01/24/97	13,379.55	-3.4%	01/24/97	5.21591	01/24/97	5.32386	01/24/97	5.45455
01/31/97	1.73	-2.8%	01/31/97	13,321.79	-0.4%	01/31/97	5.6875	01/31/97	5.69318	01/31/97	5.71023
02/07/97	1.76	1.7%	02/07/97	13,660.50	2.5%	02/07/97	5.425	02/07/97	5.48125	02/07/97	5.54375
02/14/97	1.56	-11.4%	02/14/97	13,113.26	-4.0%	02/14/97	5.57212	02/14/97	5.59615	02/14/97	5.64904
02/21/97	1.63	4.5%	02/21/97	13,444.85	2.5%	02/21/97	5.4375	02/21/97	5.5	02/21/97	5.56771
02/28/97	1.82	11.7%	02/28/97	13,398.72	-0.3%	02/28/97	5.63462	02/28/97	5.65865	02/28/97	5.70192
03/07/97	1.74	-4.4%	03/07/97	13,337.35	-0.5%	03/07/97	5.66667	03/07/97	5.70833	03/07/97	5.76563
03/14/97	1.69	-2.9%	03/14/97	12,736.53	-4.5%	03/14/97	5.625	03/14/97	5.68229	03/14/97	5.75
03/21/97	1.52	-10.1%	03/21/97	12,489.30	-1.9%	03/21/97	5.70673	03/21/97	5.76923	03/21/97	5.83654
03/28/97	1.54	1.3%	03/28/97	12,534.32	0.4%	03/28/97	5.85795	03/28/97	5.88068	03/28/97	5.93182
04/04/97	1.46	-5.2%	04/04/97	12,204.59	-2.6%	04/04/97	5.75	04/04/97	5.81731	04/04/97	5.91346
04/11/97	1.65	13.0%	04/11/97	12,516.60	2.6%	04/11/97	5.77604	04/11/97	5.83854	04/11/97	5.95313
04/18/97	1.53	-7.3%	04/18/97	12,541.18	0.2%	04/18/97	5.74519	04/18/97	5.83173	04/18/97	5.94712
04/25/97	1.65	7.8%	04/25/97	12,645.76	0.8%	04/25/97	5.90625	04/25/97	5.96354	04/25/97	6.03125
05/02/97	1.73	4.8%	05/02/97	13,081.70	3.4%	05/02/97	5.8125	05/02/97	5.90909	05/02/97	5.98864
05/09/97	1.8	4.0%	05/09/97	13,930.80	6.5%	05/09/97	5.91346	05/09/97	5.97596	05/09/97	6.03125
05/16/97	1.67	-7.2%	05/16/97	14,062.37	0.9%	05/16/97	6.44318	05/16/97	6.41477	05/16/97	6.41477
05/23/97	1.66	-0.6%	05/23/97	14,331.68	1.9%	05/23/97	6.21875	05/23/97	6.21875	05/23/97	6.22917
05/30/97	1.63	-1.8%	05/30/97	14,757.81	3.0%	05/30/97	6.29688	05/30/97	6.30208	05/30/97	6.30208
06/06/97	1.64	0.6%	06/06/97	14,655.13	-0.7%	06/06/97	6.64904	06/06/97	6.65865	06/06/97	6.67788
06/13/97	1.5	-8.5%	06/13/97	14,112.55	-3.7%	06/13/97	6.58125	06/13/97	6.6375	06/13/97	6.6375
06/20/97	1.57	4.7%	06/20/97	15,154.36	7.4%	06/20/97	6.34659	06/20/97	6.38068	06/20/97	6.39773
06/27/97	1.62	3.2%	06/27/97	15,196.79	0.3%	06/27/97	6.10417	06/27/97	6.14583	06/27/97	6.19271
07/04/97	1.52	-6.2%	07/04/97	14,822.97	-2.5%	07/04/97	5.93229	07/04/97	5.99479	07/04/97	6.0625
07/11/97	1.51	-0.7%	07/11/97	15,225.29	2.7%	07/11/97	5.98438	07/11/97	6.05208	07/11/97	6.11979
07/18/97	1.68	11.3%	07/18/97	15,570.40	2.3%	07/18/97	6.00781	07/18/97	6.15625	07/18/97	6.26563
07/25/97	1.64	-2.4%	07/25/97	15,658.12	0.6%	07/25/97	7.22768	07/25/97	7.22768	07/25/97	7.22768
08/01/97	2.25	37.2%	08/01/97	16,379.22	4.6%	08/01/97	6.82813	08/01/97	6.82813	08/01/97	6.8375
08/08/97	2.2	-2.2%	08/08/97	16,647.54	1.6%	08/08/97	6.59615	08/08/97	6.625	08/08/97	6.625
08/15/97	2.125	-3.4%	08/15/97	16,096.88	-3.3%	08/15/97	7.75481	08/15/97	7.84135	08/15/97	7.86538
08/22/97	2.775	30.6%	08/22/97	15,429.75	-4.1%	08/22/97	8	08/22/97	8	08/22/97	8
08/29/97	2.45	-11.7%	08/29/97	14,135.25	-8.4%	08/29/97	8.81818	08/29/97	8.54545	08/29/97	8.5
09/05/97	2.05	-16.3%	09/05/97	14,563.55	3.0%	09/05/97	7.91827	09/05/97	7.91346	09/05/97	7.90385
09/12/97	2.375	15.9%	09/12/97	14,470.46	-0.6%	09/12/97	7.47917	09/12/97	7.46875	09/12/97	7.46875
09/19/97	2.3	-3.2%	09/19/97	14,384.13	-0.6%	09/19/97	7.50521	09/19/97	7.50521	09/19/97	7.51563
09/26/97	1.97	-14.3%	09/26/97	14,710.87	2.3%	09/26/97	7.40385	09/26/97	7.39904	09/26/97	7.40385

APPENDIX 1

Weekly Closing for Magang, Hang Seng Index, 1-month, 2-month and 3-month HIBOR

Maanshan : 323			**Hang Seng Index**			**1 MONTH HIBOR**		**2 MONTH HIBOR**		**3 MONTH HIBOR**	
Date	Magang	Weekly return	Date	Hang Seng I	Weekly return	Date	Close	Date	Close	Date	Close
10/03/97	1.9	-3.6%	10/03/97	15,128.02	2.8%	10/03/97	7.52885	10/03/97	7.50962	10/03/97	7.50962
10/10/97	1.68	-11.6%	10/10/97	14,273.12	-5.7%	10/10/97	7.19712	10/10/97	7.20192	10/10/97	7.20673
10/17/97	1.51	-10.1%	10/17/97	13,601.01	-4.7%	10/17/97	6.80208	10/17/97	6.9375	10/17/97	7.03125
10/24/97	1.03	-31.8%	10/24/97	11,144.34	-18.1%	10/24/97	16.22222	10/24/97	15.88889	10/24/97	15.77778
10/31/97	1.23	19.4%	10/31/97	10,623.78	-4.7%	10/31/97	13.33333	10/31/97	13.25	10/31/97	13.20833
11/07/97	1.19	-3.3%	11/07/97	10,104.50	-4.9%	11/07/97	13.67308	11/07/97	13.69231	11/07/97	13.69231
11/14/97	1.17	-1.7%	11/14/97	9,957.33	-1.5%	11/14/97	9.77083	11/14/97	10.58333	11/14/97	10.89583
11/21/97	1.14	-2.6%	11/21/97	10,548.20	5.9%	11/21/97	8.43182	11/21/97	10.47727	11/21/97	10.95455
11/28/97	0.99	-13.2%	11/28/97	10,526.92	-0.2%	11/28/97	8.34615	11/28/97	9.49038	11/28/97	10.01923
12/05/97	1.05	6.1%	12/05/97	11,527.60	9.5%	12/05/97	7.30288	12/05/97	8.29327	12/05/97	9.30288
12/12/97	1.02	-2.9%	12/12/97	10,614.66	-7.9%	12/12/97	9.89453	12/12/97	10.64844	12/12/97	11.46094
12/19/97	0.92	-9.8%	12/19/97	10,405.81	-2.0%	12/19/97	7.08854	12/19/97	8.11979	12/19/97	9.14583
12/26/97	0.84	-8.7%	12/26/97	10,342.44	-0.6%	12/26/97	6.97159	12/26/97	8.27841	12/26/97	9.34659
01/02/98	0.87	3.6%	01/02/98	10,680.57	3.3%	01/02/98	7.125	01/02/98	8.22115	01/02/98	9.22115
01/09/98	0.58	-33.3%	01/09/98	8,894.64	-16.7%	01/09/98	15.55769	01/09/98	15.55769	01/09/98	15.5
01/16/98	0.415	-28.4%	01/16/98	8,900.04	0.1%	01/16/98	14.41964	01/16/98	14.34821	01/16/98	14.3125
01/23/98	0.38	-8.4%	01/23/98	8,920.20	0.2%	01/23/98	9.33333	01/23/98	10.38021	01/23/98	11.50521
01/30/98	0.42	10.5%	01/30/98	9,252.36	3.7%	01/30/98	10.375	01/30/98	11.34615	01/30/98	12.40865
02/06/98	0.71	69.0%	02/06/98	10,485.86	13.3%	02/06/98	7.25781	02/06/98	8.29688	02/06/98	9.28125
02/13/98	0.67	-5.6%	02/13/98	10,274.60	-2.0%	02/13/98	6.89453	02/13/98	7.88672	02/13/98	8.86328
02/20/98	0.66	-1.5%	02/20/98	10,599.79	3.2%	02/20/98	6.74554	02/20/98	7.4375	02/20/98	8.43304
02/27/98	0.83	25.8%	02/27/98	11,480.69	8.3%	02/27/98	6.17969	02/27/98	6.51172	02/27/98	7.26563
			Annual compund return rate		11.94%	Average	6.312491	Average	6.458926	Average	6.59462

Covariance Magang to Hang Seng Index	0.0021047
Variance of Hang Seng Index	0.0014147
Beta	1.4877333

Cashflow Forecast for Magang

APPENDIX 2

		1997 RMB'000	1998 RMB'000	1999 RMB'000	2000 RMB'000	2001 RMB'000	2002 onwards RMB'000
Turnover	100.0%	7,162,376	7,635,093	8,139,009	8,676,184	9,248,812	9,711,253
Direct production costs							
Iron ores	30.0%	1,611,535	1,717,896	1,831,277	1,952,141	2,080,983	2,185,032
Coal	30.0%	1,611,535	1,717,896	1,831,277	1,952,141	2,080,983	2,185,032
Other materials	9.0%	483,460	515,369	549,383	585,642	624,295	655,510
Repair and maintenance	3.0%	161,153	171,790	183,128	195,214	208,098	218,503
Utility	10.0%	537,178	572,632	610,426	650,714	693,661	728,344
Transportation costs	8.0%	429,743	458,106	488,341	520,571	554,929	582,675
Labour costs	10.0%	537,178	572,632	610,426	650,714	693,661	728,344
	75.0%	5,371,782	5,726,321	6,104,258	6,507,137	6,936,610	7,283,440
Selling expenses							
Discount, advertising etc.	1%	71,624	76,351	81,390	86,762	92,488	97,113
Bad debts	1%	71,624	76,351	81,390	86,762	92,488	97,113
	2%	143,248	152,702	162,780	173,524	184,976	194,225
Fixed overheads							
Pension costs		112,807	120,253	128,189	136,650	145,669	152,952
Other costs		70,000	74,200	78,652	83,371	88,373	93,676
		182,807	194,453	206,841	220,021	234,042	246,628
Financial expenses							
Interest income		- 126,811	- 83,424	- 47,357	- 62,576	- 80,139	- 101,392
Interest expenses		365,140	464,932	547,885	512,881	472,486	423,605
		238,329	381,508	500,528	450,305	392,347	322,213
Capital expenditure		4,577,934	507,016	453,037	453,037	453,037	453,037
Changes in working capital		33,900	38,175	40,695	43,381	46,244	48,556
Cash inflow/(outflow) before tax		- 3,385,623	634,918	670,869	828,779	1,001,555	1,163,154
Profit tax		85,386	49,247	39,000	55,615	74,486	92,503
Net cash inflow/(outflow)		- 3,471,009	585,671	631,868	773,165	927,070	1,070,651
Cash equivalents b/f		2,536,225	800,720	1,093,556	1,409,490	1,796,072	2,259,607
Bank loans b/f		- 3,175,133	- 4,910,638	- 4,617,802	- 4,301,868	- 3,915,286	- 3,451,751
Cash position c/f		- 4,109,917	- 3,524,247	- 2,892,378	- 2,119,213	- 1,192,144	- 121,493
Discount factor		1	0.8724	0.7610	0.6639	0.5792	5.2467
Present value of cash stream		- 3,471,009	510,923	480,873	513,307	536,932	5,617,330
Net Present value							4,188,356

Cashflow for Magang **APPENDIX 3**

	Magang 1994 RMB'000	Magang 1995 RMB'000	Magang 1996 RMB'000
Profit before tax	881,653	49,850	
Interest income	- 253,167	- 319,206	
Interest expense	138,633	342,827	
Depreciation	452,330	546,683	
Amortisation of deferred expenditure	6,268	7,967	
Loss/(profit) on disposal of fixed assets	713	84	
Profit on disposal of long term investments	- 804	-	
Exchange loss/(gain)	72,251	60,257	
Movement in working capital	- 382,419	313,714	
Net cashflow from operating activities	915,458	1,002,176	-
Return on investment and servicing of finance			
Interest received	189,298	300,397	162,327
Interest paid	- 215,209	- 341,535	- 348,181
Dividends paid	- 309,854	- 258,212	- 64,553
Net cashflow from Return on investment and servicing of finance	- 335,765	- 299,350	- 250,407
Taxation			
Income tax paid	- 121,409	- 50,330	- 10,555
Investing activities			
Purchase of fixed assets	- 1,589,909	- 1,161,130	- 1,786,314
Increase in deferred expenditure	- 4,120	- 5,664	- 11,975
Purchase of long term investments	- 4,170	-	-
Investment in fixed deposites	- 1,489,081	854,133	960,521
Proceeds from disposal of fixed assets	2,236	5,374	2,155
Increase in long term deposits	- 91,329	- 91,065	- 7,600
Proceeds from disposal of long term investments	35,804	-	-
Net cashflow from investing activities	- 3,140,569	- 398,352	- 843,213
Net cashflow before financing activites	- 2,682,285	254,144	- 1,104,175
Financing activities			
New bank and other loans	540,653	316,676	1,341,150
Repayment of bank and other loans	- 516,595	- 301,033	- 686,699
Redemption of debentures	- 45,445	- 41,376	-
Net cashflow from financing activities	- 21,387	- 25,733	654,451
Increase/(decrease) in cash and cash equivalents	- 2,703,672	228,411	- 449,724

APPENDIX 4

Adjustments to Magang, Angang and Chonggang's Profit and Loss account to ensure uniformity

	REF	Magang 1994 RMB'000	Magang 1995 RMB'000	Magang 1996 RMB'000	Angang 1996 RMB'000	Chonggang 1996 RMB'000
Turnover		6,076,488	6,216,213	6,780,405	6,243,920	3,031,891
Less; sales surtax	1				-28,436	
Adjusted turnover		6,076,488	6,216,213	6,780,405	6,215,484	3,031,891
Costs of goods sold	2				-5,377,503	-2,591,162
Gross Profit					837,981	440,729
Less;						
Staff retirement contribution	3				-13,800	
Staff quarters	4				-3,100	
Transfer to SPWF	8	-7,494	-4,320	-8,116	-38,931	-19,083
Bad debt provision	7					-7,003
Rent	6					-11,994
Investment/Interest income					45,000	4,915
Loss on disposal of assets					-6,654	-4,462
Other expense					-185,400	-89,169
Earnings before interest and tax ("EBIT")		1,012,792	1,015,966	1,012,170	635,096	313,933
Interest expense	5	-138,633	-342,827	-323,950	-83,713	-86,310
Profit before tax		874,159	673,139	688,220	551,383	227,623
Profit tax	9	-132,248	-6,649	-14,118	-201,000	-37,006
Profit after tax		741,911	666,490	674,102	350,383	190,617
Minority interests	10					-18,873
Profit attributable to shareholders		741,911	666,490	674,102	350,383	171,744

APPENDIX 4

Reference

1 Notional adjustment for sales surtax to be charged after listing

2 No detail costs of sales figure available for Magang

3 Angang is to contribute 26.5% of annual salary as staff retirement fund after listing

4 Annual charge

5 Magang: net of interest capitalised RMB23,634K (1996) RMB16,599K (1995),RMB104,015K (1994)
Chonggang: net of interest capitalised RMB8,788K

6 Notional annual rent

7 Notional provision

8 Transfer of 10% of PAT

9 Chonggang: tax at 15% of PBT

10 Minority Interest at 9%

Consolidated Balance Sheet - Magang **APPENDIX 5**

	Magang 1994 RMB'000	Magang 1995 RMB'000	Magang 1996 RMB'000
Fixed Assets	6,741,975	7,835,497	7,917,049
Construction in Progress	2,238,821	1,770,887	2,903,889
Other Long Term Assets	385,206	370,428	328,739
Current Assets	8,667,887	7,801,344	6,809,036
Current Liabilities	- 4,755,840	- 4,834,134	- 4,553,160
Net Current Assets	3,912,047	2,967,210	2,255,876
Long term Liabilities	- 1,318,169	- 1,005,494	- 1,450,413
	11,959,880	11,938,528	11,955,140
Share Capital	6,455,300	6,455,300	6,455,300
Reserves	5,504,580	5,483,228	5,499,840
	11,959,880	11,938,528	11,955,140

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